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VOL. II.—5TH YEAR. SYDNEY: SATURDAY, SEPTEMBER 28, 1918. No. 13.

THE SIGNIFICANCE OF STAMMERING AND STUTTERING, WITH CORRECTIVE MEASURES.[1]

By **T. Garnet Leary, M.D. (Edin.), F.R.C.P.E.,**
Sandringham, Melbourne.

Stammering is one of the tragedies of life that indirectly warps the forces of the brain and tends to wreck the psychic organism. The uncertainty and disappointment, almost amounting to morbidity, can be personally better felt than expressed when reviewing half a life-time which has been spent trying to find some relief from this painful speech defect. When one of a family is handicapped by this misfortune, the desirability of mapping out a future for the child is forcibly driven home to the parents. Attainments of no mean quality have frequently to be subservient to those of a much inferior order and tastes misdirected to some different channel other than a professional or commercial career. The difficulties in stammering and stuttering and how to overcome them thus open up a complex problem. Its history can be traced to various causes, and, as temperaments and conditions differ, each case must be weighed and determined accordingly. Stammering is undoubtedly a bad habit contracted usually at childhood, and, as a rule, with no previous family history of similar defect. It originates in many ways, but most commonly after acute fevers, whooping cough, fright or general debility; mimicry is also a potent factor. The starting point is always from a disturbance in the speech impulse, which is governed by the centres which regulate the entire speech mechanism. Shell shock cases have demonstrated this fact; besides, relapses are quite common during or even after active service. Neurosis always plays a predominating part, which is well exemplified by uncongenial surroundings exaggerating the condition. Excitement, over-anxiety, fatigue, or mental strain with mental effort, especially whilst trying to conceal the stammer, must bring about increased difficulty. A sensitive patient feels unscrupulous and ill-timed remarks about this misfortune, apart from ridicule and mockery at their expense.

In the evolution of a child with marked neuropathic diathesis a syndrome is often met, which comprises the outward and visible manifestations of anxiety and nervous phenomena. This becomes so established in time that nervousness is believed to be the cause and not the result. Misdirected energy is thus responsible for the various types of this distressing affection, from a lip tremor to an epileptiform seizure. Amongst the typical cases one, treated a few years ago, showed evidences of a violent spasmodic effort; the patient, while attempting to speak at the dinner table, used to occasionally sweep the meals off the table with his arms. At present he is following medicine in his last year, and has a perfect co-ordination of speech and gesture.

[1] Read at a Meeting of the Victorian Branch of the British Medical Association on August 7, 1918.

The tremor, or the start of the stammer, shows itself at first chiefly in the lips, teeth and tongue, but, if not controlled, the tendency is for convulsive or choreiform movements to develop, which may affect any group of muscles. When the stammerer has reached this stage, all self-control seems to have gone, and, subconsciously, fear replaces all efforts to speak. This fear and constant dread of speech failure accounts for most of the permanent stammering. Pitfalls are now ahead, and, as a result, needless repetition, halting to emphasise consonants or dwelling unnecessarily on certain words and a nervous magnifying of the slighest oral difficulty, especially certain initial letters of a word in a sentence. Certain words act as a deterrent or as a nightmare when the special difficult consonant presents itself for pronunciation, with the result that breathing is spent on its explosive utterance. The faculty of self-reliance is so weakened and the self-consciousness so impaired that natural utterance becomes impossible; spasmodic stopping in a sentence or hesitation even to rapid repetition of the initial letter with or without obvious facial contortion. This bad habit brings on want of confidence and fear, which, in its turn, increases the difficulty of overcoming the disability.

Stuttering is really synonomous with, or, a phase of stammering, and is shown chiefly by the initial explosive consonants during articulation. Certain letters (no two sufferers fail on the same consonant) present more difficulty than others, *e.g.*, words beginning with "p" have too many "pps" (p's); similarly in "b," "t," "d," "k," "g," etc. There is a frequent repetition of the initial letter. The word is suddenly ejaculated and the succeeding words (as, b-b-bath) are very rapidly uttered until the flow is checked by a fresh stutter. There may be associated sounds or associated grimaces caused during the effort to speak or silence evoked. The sound is no sooner made than it is instantly dwelt on or returned to and repeated by a loose spasmodic closing and opening of the lips, *viz.*, Peter Piper picked, etc.; Mother make more mustard.

P-P-Peter Pip-Pip-Piper.
M-M-Mother m-m-make.

Each consonant has its own method of pronunciation or pecularity, and requires to be mastered by studying the lips, tongue, teeth or palate so as to give the minimum of self consciousness. The hissing sound of "s" requires (for example) to be taken quietly and explained, special attention being directed to the position and movements of the tongue and to the working of the thoracic mechanism. Later a combination with vowels alone, then with short rhythmical sentences with few syllables, reading slowly with patience and deliberation after the method of intoning or singing.

"C" and "k" (cā-cā-cā-ca) as in cat.

This lack of control is not entirely of the lips, but also of the breath, which regulates the easy glide from the consonant to the vowel following. This can

be explained readily by the fact that the back of the tongue rising to the soft palate blocks the air entrance, producing a cackling or throaty noise, *viz.*, "k," "c," "sh," "ch" (guttural and palates). To remedy this defect special emphasis should be made to perfect rhythmical, free and easy breathing with the mouth open. No one stammers in producing a sound. Vocalization is quite distinct from articulation. Articulation is associated with psychological effort, and this attempt always leads to distress, depending on the special consonant required for pronunciation. In dentals and labials, for instance, the mouth and lips become closed subconsciously, hence the repeated letters, "d" and "t," or "p" and "v."

The intense consciousness of this stuttering leads to another stage in the defect, *viz.*, a tendency to check and hold the organs of speech, a reflex spasm, which disorganizes the whole vocal mechanism at the different voice stoppages. "P," which ought to move and explode at the lips, refuses. "T" (tip of tongue to roots of upper teeth), "k" and "g" (further back in the mouth) cause a choking gurgle.

Each difficult consonant must be studied, and the patient taught to become familiar with the proper position of the tongue and lips, etc., so that efforts can be directed, when in difficulty, to vocalization rather than articulation. This spasmodic hesitation causes an indirect nervous storm, as exhibited by the face muscles in various contortions to break through the various halts. Sometimes the mouth remains widely open, and a guttural thick sound emanates from the throat ("k" and "c") simulating a fit; or, in dentals ("t" and "d") a spraying of saliva or spluttering results.

The whole success of the treatment depends in creating in the patient's mind a feeling of confidence and self reliance, and especially explaining a well defined system, thus showing how and where the trouble exists. It must be assumed that all sensitiveness has been overcome and that nothing will tend to disturb the mental balance. This is gained by knowledge of the technique and management of breathing and rhythm, but the surroundings will undoubtedly influence prognosis. The family circle and friends should comprehend that their help is needed. To bring this about patience and temperate sympathy must be the *sine qua non*. Personality is an invaluable factor in helping to allay fear, thus instilling kindly and wise encouragement possibly to the suggestion stage. "Hypnotic influence is markedly useful, in certain selected cases, when the patient's mental stability has been temporarily upset as in returned invalided soldiers." Cases of this kind respond by mental impressions being wiped out. Whenever improvement is not sustained or markedly shown, a definite history of the disability can be traced to a recurrence of an old habit. Active service conditions seem to precipitate old standing or previous defects in speech, and from observations and personal experience whilst in the Australian Imperial Force and at the Base Hospital, this inco-ordination seems to be based on interference with the speech regulating mechanism. This is brought about in many instances from shell or war shock, or from the strain of long hospital nursing routine, or with the uncertainties and disappointments associated with army orders in strict discipline of soldiering. If there is no history of previous stammering, hypnotism exerts a speedy and magnificent result in skilled hands. The success attained at times seems awe-inspiring. Major Clarence Godfrey, Royal Park Mental Hospital, can claim to have given the Repatriation scheme help of no mean order in his results by hypnotism, but these subjects acquired their stammer only whilst in active warfare. Hypnotism not infrequently fails, as in the case of a returned soldier, Sgt. J., who earned the Military Medal. He had been treated by me some six years previously. His pension being in abeyance on account of the stammering being a pre-war affection, Major C. G. Godfrey referred him to me. After a week's treatment of careful speech drill, such as is here suggested, he was able to enter into conversational speech, and use the telephone quite freely. As a recruiting public speaker he is now perfect.

It is to be understood that the sufferer must realize the serious disadvantages ahead, and that no cure can be guaranteed or even offered permanently. Subjectively and objectively, a thorough physical examination for organic troubles and defects in the organs of speech and for nervous disorders, followed, if need be, by treatment, should precede any corrective measures.

As a guide on the educative respiratory methods and exercises Behnks's "Speaking Voice" can be recommended. These are to impart a proper method of breathing, and thus strengthen and exercise better command in the various muscles concerned in speaking, more especially in mastering the economy of breath, *i.e.*, a deep inhalation, without effort, with the mouth closed, and a slow exhalation with open mouth. The movements ought to be slow, rhythmical, and performed with precision. They can be compared to the violin player, or the crew of a boat in rowing. The evenness of bowing or rowing corresponding with evenness of respiration and the difference in speech in contra-distinction to short irregular and jerky breathing, which is present in all these cases. X-rays confirm this lack of uniformity between the diaphragm and costal movements as the spasm of the stammerer can be well defined.

These exercises can be grouped into different classes:

1. Respiratory exercises which are to include the lungs and diaphragm. The proper position is explained, the whole body being held in a relaxed, comfortable and well balanced position, with the shoulders thrown well back.

The throat and all the articulatory muscles must always be free from reflex spasm, and should never participate in effort. When the sterno-mastoid muscles are tense with a modified trismus or an expression of physionomical strain, the teeth sometimes are noticed to be tightly closed. Before speech is started this condition must be altered by a prolonged course of respiratory drill.

2. When the mouth and lip movements are properly understood, chest expanding exercises can be started. These are directed towards the maintenance of respiratory control by the production of an even rhythm between inspiration and expiration and to increasing the chest capacity. In contra-distinction to Sandow's development of muscle, dumb-bells are not necessary. The arms are to be slowly raised horizontally with

palm of the hands downwards, and various swinging movements executed in combination or rhythm with deep breathing through the nose and expiration through the mouth.

If improvement is not decisive and well marked after five days' patient endeavours, the only solution is that inefficiency is due to want of application and concentration. This applies mainly to children who are not old enough to understand what their speech disability means. Under personal supervision, two weeks, taken as a rule, usually suffice to correct faulty breathing and to bring about harmony with perfect vocalization. This brings about a desire to practice, which is based entirely on ambition with a feeling of growing self-confidence and independence. Complete freedom and a facility of speaking and reading prose gradually results in nervous children and emotional subjects whispering rhythmical short syllabic sentences or poetry. The gradual application to conversation helps to modulate subconsciously the pitch of the voice.

Failures can be summarized from:—

(1) Lack of attention to general rules.
(2) Hyper-sensitiveness amongst strangers.
(3) Refusal to carry out the technique.
(4) Lack of concentration and practising corrective exercises.
(5) Articulation when in difficulty in place of vocalization.
(6) Expense in the treatment not self-borne by the patient.

When the patient considers the routine a troublesome, irksome task, and believes that the impediment is of no inconvenience as it is not observed by strangers, it is useless to persevere. This mistaken idea is the outcome of personal vanity with *sang froid* manner in persons who cannot be taught. It is based on a long-standing, independent spirit of making the best of things. This form of speech defect is possibly temperamental, when their success in life has been assured and does not depend on their own effort. Either the patient considers that age and additional expense are against further experiments or that a likely improvement would be incredible or impossible. On the other hand it is thought that an alteration of their previous *modus loquendi*, at the expense of jocular, ill-timed ridicule, would bring them into an unnatural category, quite foreign to their tastes and surroundings. Their singularity and individuality would be lost to those accustomed to their habit. It is little wonder, judging by the history of chronic cases who have sought many "pastures fresh and green," besides diversified means of treatment as advertised, that those who have been made a prey to the exploitations of electrical and elocutionary aims alone, with pre-paid fees, have every reason to be distrustful and dispirited. Practically every case of long standing can be traced to despair and hopelessness. They have lost confidence and have been philosophical to make the best of a bad job.

In my experience no ready-made method of dealing with this misfortune physiologically has been devised which can yet be accepted as a certain and royal road to educational success, apart from determination and application. The study of each individual as a unit, presenting its own special difficulties, with psychology as a sheet anchor, cannot be overlooked. The best plan is for the patient not to conceal their new method of speaking, but to advise their friends that they have to vocalize and to look to them for their forbearance, taking the motto, *fortiter in re suaviter in modo.*

Before school life is started it is absolutely essential that a cure is effected, because a certain amount of teasing or mimicry must accentuate the trouble, and the whole morale of the child, apart from the moulding of the mental processes, must be undermined. In some cases it is essential to get an intelligent nurse who will devote her whole time to the little patient and explain the rhythm with sympathetic firmness and patience. This helps to re-establish control and re-assurance. It may, in fact, be safely laid down as a general rule, that if a morose and sullen disposition is acquired in a patient so afflicted, it is not a natural disposition, but directly the result of a realization of the handicaps and disappointments of life.

The patient must be impressed by the fact that no miracle is about to happen. When the speech drill is learnt, a daily regime must be planned and effectually carried out for some months, say three times a day before or after a meal so as fix a definite time, otherwise a relapse or a reversion to old habits will eventuate from carelessness and want of thought. The most noteworthy and creditable results have been obtained by ambition amongst the least sensitive (devil may care) patients; their efforts are well sustained.

The first week's endeavours must be started with isolation from friends and relatives, so that strangers can be approached and a thorough test made before them. To enter into the family circle or sympathetic arena without self-control, and ignore or refuse to apply treatment because of ridicule or of fear of detection by their altered rhythmical swing, is to cause immediate and irremediable confusion, and ends in disaster.

It may be of interest to record the kindly and frequent advice, extolling alcohol's virtue, given to some stammerers whose lips quiver, and whose demeanour to strangers shows a shivering or nervous tremulousness. This practical but mistaken form of *bon camaraderie* "to keep the cold out" too often means a falling into line with the song of "The Bing Boys" ("Another Little Drink Won't do us any Harm"). In place of the lack of breath-control undoubtedly the smoothness and ease in the oral and vocal mechanism is influenced by this factor in many cases. Alcohol is stated to be a powerful means of instilling self-assurance to overcoming "nervousness," but the quantity of alcohol consumed must be disproportionate to the amount of restraint and coherence in mentality.

Rhythmical, regular breathing is first practised as in yawning, then a sound is produced as in sighing, which can be applied to the vowels. It is necessary to keep the mouth open, with the lips well apart, and order the sound only to be produced on the vowels, taking care at first not to articulate them. This could be done before a mirror in practising. The sound can be modulated through the various stages of pitch, *i.e.*, running the gamut of the musical scale from softness to loudness.

When mastery is felt, each vowel can be articulated in a low tone, and practised in seriatim until the

vowel sounds can be gradually increased in a prolonged natural tone, so that a musical note is practically simulated. Beating time with the hand at first, as in a pendulum movement or by demonstrating the violin bowing, helps to get the rhythm or swing.

A drilling in the rising and falling inflection of each vowel sound by commencing the sound with an effusive utterance, rising to the full pitch of the voice, then by beginning with explosive force and gradually sinking to low tone again is useful, the idea being to cultivate the economic expenditure of breath during articulation. Singers and elocutionists, who are stammerers, do not stammer whilst singing or reciting. They rhythmically open the mouth and accentuate the vowels at the expense of the consonants, thus making the articulatory sound prolonged. A stammerer, likewise, does not tend to stammer if the voice is not raised above a whisper, as the voice is not involved. The reason is that the muscles concerned in articulation are employed, but not those of phonation. In whispering the laryngeal mechanism is less utilised. The diaphragm and inter-costals are also not brought into action. This is observed in hysterical aphonia. Phonation is simply a physical manifestation of the defect of stammering. Similarly it has been noted in some types of respiratory defect that vocalization is attempted at the end of expiration or the beginning of inspiration. There being little or no air with which to vibrate the vocal chords for the production of voice, the stammerer's attempt to speak results in a temporary aphonia, and their failure to produce speech reacts detrimentally upon their psychic centre and the stammering interval.

No one can find difficulty if they pronounce an articulate sound, because no effort is made to use the parts of speech which make voice. This can be suitably contrasted with the loss of the normal, perfect co-ordination between the action of the expiratory muscles, and the laryngeal and articulatory muscles, the laryngeal muscles being most at fault, so that the patient is straining his articulatory mechanism instead of vocalizing.

The letters of the alphabet are taken, as far as possible, after the method of the vowels with special reference, and noting the consonants which cause the stutter. These troublesome letters are taken separately and practiced with the vowels alone or with short sentences as in nursery rhyme "Jack and Jill went up the hill" or "Little Bo Peep."

The words including all parts of speech are all given equal value by prolonging the terminal part into the beginning of the next word, thereby simulating at first a monotonous drawl or lalling sing song utterance.

The unnatural speech gives perfect control, and can always be used to exert self-confidence and self-reliance. This method is always useful to meet an emergency, as in excitement, passion, or even determined attempts at phonation with failure at repeated articulation.

These nursery rhymes can be readily replaced by smooth verse, which produces an agreeable rhythmical cadence. Conversation can be met in this same slow, deliberate manner. When perfected this swinging rhythm is scarcely detected, and is gradually looked upon as an idiosyncrasy. Whenever difficulty is presented at the beginning of a word or whenever the selected consonant throws the sentence out of gear, it is always expedient to omit the difficult consonant and emphasise the succeeding vowel or the vocal element of the consonant.

In telephone work the idea of lowering the voice or altering the character of the voice, like a racial characteristic of nationality or nasal accent, helps to tide over the difficulty, *viz.*, getting a railway ticket, or if hustled for an answer, etc. Speaking into a house dummy telephone has been successfully tried and found by me in many cases a marked help, independent of raising the voice when alone in a room.

Irritability and misplaced sympathy will militate against a successful issue, as the emotions (crying) will be in the ascendancy, and the patient will not give his best, especially girls. Besides any discouragement or impatience shown will often break down a well formed system of a sympathetic knowledge of child nature and human nature study. "A fellow feeling makes us wondrous kind."

SOME CASES OF STAMMERING FROM WAR SHOCK TREATED BY PSYCHOTHERAPY.[1]

By **Clarence G. Godfrey, M.R.C.S., Eng., etc.,**
Major (Hon), A.A.M.C., Medical Superintendent, Royal Park Military Mental Hospital; Consultation Staff, No. 5 Australian General Hospital.

During the past two years a number of cases have been referred to me for treatment by hypnotic suggestion at No. 5 Australian Garrison Hospital, in which stammering or stuttering has developed, or has been revived, after years of disappearance, as the result of shell-shock or of various war stresses. In the majority of these cases there had been, in addition to the speech disorder, certain neurasthenic conditions, such as persistent muscular tremors, insomnia, functional paralyses, and so forth, which had disappeared or diminished; but the stammer had remained as a severe and distressing defect.

It must be recognized that in all these cases the active cause is the psychic disturbance. Practically all of them exhibit a temperament showing nervous excitability, and many of them have a definite neurotic history. Every variety of stammering is met with in these war cases, the true stutter with spasmodic repetition of the initial consonant or syllable of words, the stammer, with the arrest of utterance of vowels from the spastic action of the sets of the respiratory muscles, and the more complicated stammer resulting from the inco-ordination existing between the sets of articulatory and respiratory muscles. But, whatever the mechanism producing these phases, there is governing it all the persistent self-consciousness and hypersensitiveness, the lack of confidence in a capacity to speak correctly, the dread of ridicule and shame, the suppressed emotionalism, and, at times, even a mental confusion and flurry, all of which, to my mind, may act in many cases as a formidable obstacle to rapid recovery under the system of exercises, and methods so brilliantly elaborated by Scripture[2] and other specialists.

[1] Read at a Meeting of the Victorian Branch of the British Medical Association on August 7, 1918.
[2] Scripture, *On Stammering and Stuttering.*

I do not for a moment contend that these well-known methods, particularly those exercises designed to obtain confidence in speech and in thought, fail to overcome in time the abnormal mental condition, which, I am compelled to maintain, is the essential factor; but I am convinced from personal experience in these analagous functional disorders that more rapid results and possibly a closer approach to complete recovery, are obtainable by regarding the psychic condition as the first point of attack and by applying psychotherapeutic methods in the first place, supplementing these, if necessary, with the recognized procedure of the expert who treats this disorder.

Each case of stammering, therefore, which has come under my care at the Base Hospital, I have hypnotised, and, although it is premature to speak of results as cures, they are at least gratifying. The method that I have invariably adopted, has been to induce a hypnotic sleep or lethargy, and to suggest to the patient that he is now perfectly at ease mentally, that he can now pronounce the stumbling words as easily as any others because his vocal mechanism is sound and intact, that mere nervousness has interfered with his normal powers, that the nervousness is no longer felt by him, that nothing prevents him from being able to speak clearly, and that he will be convinced of his ability to speak normally when he finds himself doing so on awakening. I then order him to repeat after me simple words or sentences and lead up to difficult ones, and, in almost every instance, these are spoken fluently and in a normal tone. Strongly expressed suggestions are then given as to the patient's capacity to speak equally well on waking. Sometimes I have told a patient to keep on repeating some well-known nursery rhyme and not to cease at the signal to awake, although in the middle of the rhyme, but to keep on talking. He will usually manifest his astonishment at finding himself talking without difficulty. Sometimes a patient will converse on waking without realising that his stammer has disappeared, until his attention is drawn to it, with amusing effect. In several cases, however, it is noticed that the stammer, after disappearing entirely for some time, will return, but always in less degree. In one case (No. A) the patient spoke perfectly in the sleep, at the first attempt to hypnotise him, although he had had a very bad stutter for eight months past, being almost inarticulate. He woke in a few minutes apparently cured, and has been free from stuttering ever since. It has been noticed that every case I have treated, even the worst, has been able to speak far better in the hypnotic state than out of it, all the inhibiting influences of emotionalism being then removed or diminished. This surely establishes the condition as a psychosis rather than a neurosis.

Lack of space prevents the illustration of the foregoing by more than two or three cases in the briefest terms.

No. A, Private W., was buried by a shell explosion for three days. He remained unconscious for some unknown time. When he became conscious he could hardly utter a letter of a word. Some time later he "got back his voice," but with a most dreadful stutter. This remained unchanged for the past nine months, up to the day he was seen by me. He had had treatment by breathing exercises and so forth from a lay expert (lady) without any benefit.

On admission to the ward as an out-patient he was free from tremors, but had insomnia and headaches. He stuttered violently at every attempt to speak, reduplicating initial and intermediate consonants eight or more time at each attempt to articulate, and becoming almost incoherent. He was hynotized easily in one or two minutes, when he appeared to reach definite unconsciousness. On suggestion, he was able to speak at once, rather slowly, but with little stammer, which rapidly disappeared. He was soon speaking difficult sentences with catch-words that would severely try a fluent speaker. On awakening him, his power to speak quite well remained, and he was most astonished to find himself entirely free from his defect. He has remained well ever since, but the treatment was repeated on a few occasions at intervals of four days, as a precaution.

No. B, Private O'B., suffered from trench nephritis and shell-shock in France. He had been buried and unconscious. On recovering consciousness he had very bad tremors and aphonia. When the voice returned, marked stammer was left to a serious degree, but improved somewhat with rest and treatment. His boat was torpedoed, and all the trouble returned and the stammer became worse than ever.

When first seen by me last year, he had marked tremors, nervousness in traffic, insomnia, and a very bad stammer of a gasping and elliptical type, which distressed him a good deal. Very light drowsiness was induced by hypnosis. In this condition he was fairly conscious, but could not open his eyes. He spoke remarkably better in this state, and also on being roused, but less so. Repeated treatment for three days resulted in his stammer passing almost entirely away. While convalescing in the country some six months later he was put in contact with an epileptic, and became upset at seeing the fits. He had severe hysterical attacks of an epileptoid nature. The stammer returned in a severe type, together with marked neurasthenic symptoms. On returning for treatment he improved at once, and quickly dropped nearly all trace of the stammer, except when placed under embarrassing or exciting conditions, when the stammer would temporarily recur. He is now approaching his former state of recovery.

No. C, Private M., suffered from shell-shock at Messines. He was buried and unconscious all night. When he became conscious the voice was gone, but returned at first with a gurgle, of a very faint kind. Then he began to speak with a very bad stammer, which would upset him very much. This never showed the slightest improvement since it developed about a year ago.

When first seen by me he had a very bad stammer, and when questioned could hardly make himself understood. He was easily hypnotized (after watching No. A being treated), and appeared to reach a state of unconscious sleep. He was at once able to speak without the slightest trace of stammering, and conversed quite fluently on being awakened, and showed his delight at his novel experience. He began to stammer a little later on, but to a very slight degree, comparatively. Treatment has been continued since, and his improvement is maintained, but under excitement, or when

suddenly confronted with strangers, some stammering recurs, but passes off quickly.

No. D, Private W., suffered from shell-shock. He was buried for some hours and wounded. He became nervous in traffic and sleepless, and exhibited slight tremors of arms and legs. He developed a very bad stammer, which was his chief worry, as he was desirous of taking up public life. He had been a stammerer as a young man, but had gradually overcome it after years of treatment by the Benke and other methods. The patient was aphonic after the shock, and on recovery of his voice could only stutter and stammer. When first seen by me he could not speak two words without stammering on them. Hypnosis of a light type was induced, and he improved very steadily and was fairly free from the defect in four weeks. After another eight treatments, at intervals of three or four days, he showed no signs of it and gave a recitation before a room of strangers. Some months ago he reported that he was quite cured.

Reports of Cases.

"SOME INTERESTING CASES":
Clinical Remarks to Students in the Operating Theatre.

By **R. Steer Bowker,**
Senior Surgeon, Sydney Hospital.

The cases we have for to-day are interesting ones. You have heard my new House Surgeon ask me: "What after-treatment would you like them to have?" and my reply: "Let us first see what we have to do for them." On the operating list my late House Surgeon has put them down as: (1) Gastro-enterostomy, (2) gastro-enterostomy, (3) prostatectomy. Now, as I do not know that I shall do a gastro-enterostomy on either of the first two, nor a prostatectomy on the third, I have replied to him as I have.

This first patient is a man who has suffered from bronchial catarrh and cough for many years, and now has very marked emphysema. The anæsthetist, very rightly, is giving him chloroform and not our usual ether. He is 57 years of age, and looks pale and wasted. Some three years ago he had what was said to be an attack of "gall-stones" and gastritis, since which time he has had "acid risings" and more or less indigestion, with pain and distension after food, relieved by vomiting. He has lost a deal of weight, as you may judge by the ease with which I pull up the skin of his abdomen, showing the loss of subcutaneous fat.

I sent him into the hospital, and he was given a bismuth meal and his stomach and intestines screened in the X-ray Department. Here the report is: "Pyloric stenosis, probably malignant."

I will now proceed to open his belly by a short mid-line incision. The stomach and pylorus come at once into view. I find no evidence of disease of the stomach. I invaginate the tissues, and my thumb goes with ease through the pylorus. I examine the gall-bladder; it is flaccid, contains bile and is apparently healthy. There is no trouble in the appendix. Now what is the cause of his trouble? Why is it that I can pull up the pylorus so easily? That is not normal. He has a very mobile duodenum, a condition I have often found and spoken of when making these operations. A condition I have never seen described, but which I have recognized for years as being abnormal and causing symptoms such as this man complains of, and which I have treated as I am now going to treat this. By means of two chromic gut sutures and some scraping of the tissues, I fix the duodenum to the parietal peritoneum and close the wound very carefully, using chromic gut, reinforced by a couple of kangaroo tendons through the muscles and aponeurosis.

Now, this next patient, a man 40 years of age, looking anæmic and cachetic. He came to me six months ago, complaining of "anæmia and gastritis," and I find, on looking at my notes, that I had put him down as probable "malignant disease of the stomach," and that I thought I could feel a tumour. I sent him to the hospital, where he was put under my medical colleague, and, as a result of his treatment, was feeling better. He refused to submit to operation, but promised to return soon. He left the hospital against the advice of the physician, and in spite of the information afforded by the skiagram. A few days ago he wrote to me, on account of the pain he was suffering, asking me to get him into the hospital for operation. Twelve months ago he weighed 15 stones; now he weights 10 stones. The X-ray finding is that he has malignant disease of the pyloric end of the stomach. I am afraid he is too far gone for operation to do any good. Still, at times, we are mistaken, so that I now make a small incision and open the belly. I explore with the finger and find a large mass, involving the greater part of the stomach, extending from a crateriform ulcer near the pylorus along the lesser curvature, fixed behind and having a chain of enlarged glands extending upwards as far as I can feel. No operation would do him any good, so now that my assistant and house surgeon have examined him I will close up the wound—a very small one—almost *à boutonière*, using, as before, chromic gut and a couple of kangaroo tendons, so that he may soon return to his home in the country.

According to the Rochester teaching—I speak from memory—33% of cancer in man is cancer of the stomach, and 70% of cancer of the stomach originates in ulcer. Cancer of the stomach, if operated upon early enough, is most amenable to successful treatment. Chronic indigestion in people over 40 should always be viewed with suspicion. Marked anæmia is often amongst the first signs, especially when the cancer is in the body of the stomach and there is no obstruction to point to the trouble. These cases are generally too far advanced when they are recognized.

William Mayo describes the kindly general practitioner, who knows the whole family intimately, and calls them all by their Christian name. Maggie has a small lump in her breast. She sees the doctor about it, who takes her kindly by the arm and says: "Don't you worry, Maggie." "Don't you worry, Maggie," he says is the cause of many preventible deaths, and I would add another saying, and one we are all prone to use before we decide to open a belly in a person not very sick, for it probably opens the road for a patient to drift away, and that is: "Let us try a little medicine first." Bismuth and magnesia have a deal to answer for, although bismuth is now atoning, by enabling the X-rays to help us. Do not suppose that, by saying this, I am advocating that every embryo-surgeon is to make hurried and ill-considered explorations of the abdomen. Modern asepsis has enabled men, if they are careful, even though their knowledge and experience are small, to open the belly without causing death or even pus to occur. Parkes, of Chicago, in a very outspoken article in the *Blue Book* says of this safe asepsis that it is not altogether an unmixed blessing, and it has afforded "a playground for ignorance, cupidity and deceit."

The mere ability to open a belly safely and close it up again is no excuse for doing an "exploratory operation," and if a practitioner does this operation he must feel that he is capable of recognizing and dealing expeditiously with any condition he may find, for these patients will not stand 2½ hours of "mauling about," and what R. T. Morris calls a prolonged ether debauch.

A man may be quite qualified to row a dinghy across the harbour, but would therefore be hardly qualified to navigate the *Osterley* to Europe, but should his egotism go so far as to make him think himself capable, the Board of Trade would step in to prevent him. There is no Board of Trade to prevent the embryo-surgeon doing as he chooses; there is only his own conscience, and if he has not that, then there is only that which prevent other would-be burglars—the law; but, unfortunately, he is not so easily caught as his *confrère*. Some little time ago a patient came to me who had been under a doctor in the country for three months. The doctor had sent a letter (showing how little he realized what he had done), explaining the case. He had had her under treatment for six weeks, and had found a mass in the epigastrium. He then opened the belly and described in his letter how he had found the mass which was in the stomach freely movable, and he thought it could be removed. She had remained there another six weeks, while the wound healed, and he then sent her to Sydney to have the growth removed. Three

months lost, and when I opened the belly I found a growth in the stomach, free except where it had become anchored to his wound. I excised the growth with portion of the stomach and portion of his scar where the growth had been attached, and she did splendidly for some months, but at the end of twelve months she returned with coils of intestine cancerous and attached to the cancerous cicatrix. Cancer had been implanted in the scar, and the case was hopeless. No doubt, had the growth been removed at the first operation the woman would have done well.

A course of operative surgery in a class, supplemented by a few months as a resident in the hospital, is not sufficient to enable a man to do, or justify him in doing, these operations. He should, at the least, serve an assistantship for twelve or eighteen months in a large metropolitan hospital. It may be said that this is impossible. Then for those to whom it is impossible, it should also be made impossible for them to betray the trust the public place in them and for them to try to do things for which they know they have not had the training that is necessary. For surgeons are not born, they are only made, and that by constant watching and practice, and even then, God knows, we have all of us little enough experience.

You may well ask me: "Why do you operate upon these advanced cases of malignant disease of the stomach?" Well, we are seldom absolutely sure that if it is cancer that we may not be able to help with a "drainage operation," and if it is done quickly (I don't mean hurriedly), with a small incision, we can make sure without endangering the patient to any appreciable extent.

For instance, some time ago I had in the hospital two patients. One, a young man of 26, with few of the symptoms of malignant disease, but a large mass to be felt in the epigastrium, so large that I hoped it might be, taken with his age, a hydatid. I operated and found a huge cancer of the body of the stomach—inoperable—and not even to be benefited by a gastro-enterostomy.

The other case was that of a man of 50, anæmic-looking, with all the signs and symptoms of cancer of the pylorus. I had just done the young man, and did not feel inclined to explore a similar case, and rather influenced the man against any operation, saying I was afraid it would do but little good, and he decided not to have it done; but by my next operating day he had changed his mind and asked me to explore. This I did with some reluctance, and found that he had no cancer, but a hydatid from the under surface of the liver, interfering with the stomach, and he was cured. This happened in the days before we knew about bismuth meals; it would be less likely to occur now. But still, in some cases, even with this help, we are not absolutely sure.

Last Tuesday we had two stomach cases, one of inoperable malignant disease, the other with symptoms, etc., pointing to malignant disease. In this patient all abnormal that we could find was that his duodenum was more movable than it should be.

To-day we have on the table a young man, a Greek, who has been for some time in a medical ward and treated without much benefit. He has had all the signs and symptoms of ulcer of the stomach—pain in a quarter of an hour after food in the epigastrium, tenderness there on pressure, with vomiting on several occasions of "coffee grounds" in some quantity, and nothing else to account for his weakness and general *malaise*. With "his notes" is a report from the X-ray department, which is quite definite: "Ulcer of the stomach in the lesser curvature, near the pylorus." However, we have placed his case on the operation list as "ulcer of the stomach (?) exploratory laparotomy."

I will now open his belly by means of a short incision over the right rectus, separating the fibres of that muscle. The stomach and duodenum do not come up into the wound, but I can find no trace of ulcer in either viscus. I enlarge the opening somewhat, to enable me to explore further the stomach, and can even now find no sign of ulcer, so that we must conclude that there must be some other cause for his symptoms. I examine the gall-bladder; it is healthy. I pass my hand down to the iliac fossa and feel for the appendix. I feel at first some small masses, which feel like enlarged glands, but on further exploration I find that there is a large appendix, in which are hard stercoliths. Three of them, separated from the caecum and from each other by short spaces, giving the feel, at first, of a chain of enlarged glands. Now we must remove the appendix. I shall not extend my present opening, as that would leave a large wound and tend towards a possible hernia, but shall cover the wound up and make a curved transverse incision below the anterior superior spine of the ilium, in Kocher's cleavage line, as this will enable me to open without cutting any muscle, and leave a very fine scar. I split the external oblique tendon, retract and expose the "white line" where the sheath of the rectus is formed. I cut across this line—not too deeply, for fear of wounding the deep epigastric vessels—seize each edge with forceps and have them held up whilst I split the internal oblique and transversalis muscles and catch with dissecting forceps the peritoneum, which you now see bare, with the transversalis fascia, hold it well up and nick it with a knife, so, and allow the air to get in, which separates it from intestines and omentum and enables you to place on the cut edge forceps to act after as "guy lines." I stretch the opening with small retractors, push out of the way coils of small intestine and omentum and seize the whiter looking caecum. I find the muscular band leading to the appendix, locate it, fix it, ligature the meso-appendix and divide it, ligature the appendix at its base, place a purse-string suture round the base, in the caecum (taking in the ligatured stump of meso-appendix). Then I divide the appendix and cauterize the mucous membrane with carbolic acid and bury it in the caecum by means of the purse-string suture. This nicking of the "white-line" simplifies the procedure greatly. I learnt it from Mr. Dunhill, of Melbourne, who was told of it by Professor Watson, of Adelaide. (There is always something to be learnt from visiting and watching other surgeons at work.) Now I carefully close up both wounds. The patient is in good condition and we have not distressed him by the operations, and I believe we have got at the cause of his trouble.

Fowler, in 1903, described these cases of *vomito negro*, but as occurring in acute appendicitis. I have had a few of such cases. He attributed it to thrombosis of the mesenteric veins, causing infarcts and septic ulceration in the mucous membrane of the stomach. It is probably due to septic absorption.

Rosenau, of Chicago, states that, by taking streptococci from the tonsil and injecting them into rabbits, he could invariably cause ulcers to form in the stomach.

Van Zwallenberg some years ago argued that appendicitis, that is, the perforating or destructive form, was caused by the cutting off of the blood supply, either to the whole (obliterating endarteritis) or in part by the pressure of a contained mass (stercolith) on the mucous membrane compressing the underlying vessels against the muscular coat and serous coat, devitalizing the mucous membrane and allowing it to be attacked by contained organisms.

Now this is probably what has occurred in this young man, and this pressure necrosis has allowed of absorption of septic material and its lodgement in the stomach wall, and hence the bleeding.

Perhaps that may also account for those cases of what Hale White calls gastrotaxis and others Einhorn's disease.

In mentioning Van Zwallenberg's "ball valve" theory of distension and compression, this appendix is of the form in which it is least likely to act. You see it is of the "fœtal type," the caecum tapering off into the appendix, with a broad opening from the caecum to the appendix, in which the folds of Gerlach and Nanninga are much less developed than they are in an appendix coming off at an angle, and though in this type it is much easier for fæcal material to get into the appendix it should also be much easier for it to get out into the caecum again. This material becomes stagnant and forms stercoliths, as it has done in this case, and stercoliths of such density that they have evidently been there for some considerable period.

There was another case, one of advanced malignant disease of the stomach, which I wished to do to-day, but the man refuses operation. He will probably want it done later, when I shall have to refuse to do it.

It is important to deal effectually with ulcers of the stomach. They are prone to rupture or become chronic and end in cancer, no doubt due to acid gastric secretion, much more so than is duodenal ulcer, where the secretion is alkaline.

As to the cause of gastric and duodenal "ulcers," there are a variety of opinions. Bland-Sutton once told me that he thought duodenal ulcer was due to whisky drinking, but I take it (except in some rare cases of duodenal ulcer, as described by McGrath, of Rochester, due to the sloughing out of a small accessory pancreas—"pancreatic rest" I think he

called it—a case of which I think I once had, where the ulcer had deep walls, such as would be left in a deal board where a "knot" had come out) that the cause in each case is the same. Young women are very prone to gastric ulcer, but they drink very little whisky.

Mayo says they are caused by drinking hot tea, and points out how the irritation of heat causes ulcer and cancer. He instances the Kangri cancer of Kashmiri, caused by the natives wearing braziers under their clothing for warmth, and also the fact that Chinamen are very prone to cancer of the gullet from swallowing very hot rice. In his reasoning he says that, when the stomach has food in it and a cup of hot tea is swallowed, along the lesser curvature is formed a canal—a *canaliculus gastricus*, as described by radiographers. Thus the hot tea goes straight along this, out through the pylorus and into the duodenum. He urges the frequency with which the ulcer is situated on the lesser curvature in support of his theory.

All of these patients are, as Mayo says, "dehydrated," so that, where practicable, for a week I have their stomachs washed out (omitting this on the day of operation), and have them given each night an enema of saline solution, which they retain. After operation I encourage movement in bed, especially of the legs, as I think it tends to prevent stasis in the veins, and consequently femoral thrombosis. I let them have food as soon as possible, but object to their having any milk. Before operation I give them a few doses of salol and by these means I think I seldom get that distension which is so distressing. If they complain I order an enema of milk and molasses, which generally relieves them. I get them up and about as soon after the fourteenth day as possible, as œdema of the leg occurs about the fourteenth day. If one let them up before this and œdema did occur the patient would probably blame the doctor for letting him up "too soon," not that it would have anything to do with it.

This man is the patient who refused operation last Tuesday. He now asks to be operated upon. There is no doubt about his having malignant disease of the stomach, and the X-ray report is "dilated stomach, pyloric obstruction; malignant." There is no doubt of it. We can feel a mass, and he has left it very late. Still, I fancy that I can move the tumour, and although he is weak and asthenic, we will give him the chance. Although it is doubtful, as I explained to him, whether any good can be done.

I open his belly and find a mass in the pyloric end of the stomach, and can feel a large, round ulcer within the pylorus, fixing the stomach wall to the pancreas. Still, I think I can remove it, so I pass these large stomach clamps and clamp and cut away the stomach and try to free the duodenum and pyloric end. I have great difficulty in doing so (had I known it would have been so difficult I would have been satisfied with a palliative operation—a gastro-enterostomy). After some time and a deal of trouble, I have freed the mass, clamped the duodenum and cut away the mass. I now close the duodenum and the stomach. I loop up the jejunum, draw on it until I meet the ligament of Treitz, pull up the colon and pull down the posterior wall of the stomach and with these small clamps approximate the jejunum and form a juncture.

There is considerable shock, so, before closing up, I will put some saline solution in his belly cavity. I give him a hypodermic injection of camphor and order him some hot coffee and brandy by the rectum.

I examine the specimen. You can feel, firstly, that you cannot get your finger through the pylorus for the growth, then, having split it open, you see the large, callous ulcer, with thickening and inflammation all round, and the posterior position of the ulcer, almost through the wall. Hence the difficulty in its removal.

To-day we have two stomach cases. I am sorry that there are not more students here to see them, as I am sure they will be interesting. This first woman has been in hospital before. She has had various gynæcological operations performed upon her, and has now come again. She is said to have gastric carcinoma, but she does not look to me like a woman with such a disease, though she brings an X-ray report of "pyloric stenosis, probably malignant." I advised her to wait from last Tuesday, and told the House Surgeon, in spite of her symptoms, to postpone the operation and have another X-ray examination.

I now open her belly, and find a too freely movable duodenum, which I will fix, as in that case I did two weeks ago. The pyloric orifice is patent, and there is no growth. She has another trouble, which may have something to do with her symptoms. Her recti muscles are widely separated, from the lower part of my wound down to her old gynæcological wound. I will fix this opening up. Dr. Edwards comes into the theatre and tells me that her stomach was down to her iliac crest, as seen on the screen. I dissect the skin and fascia back from the aponeurosis widely until I come on the widely separated muscles. I slit the aponeurosis on either side of the wound, as far as the separation goes, and free the muscles. Now, with two chromic gut sutures I close the peritoneum and the internal edge of the aponeurosis. Over this I stitch the internal edges of the slit aponeurosis, over this again the muscles. Then, placing two kangaroo tendons, one above and one below, through the external portion of the slit aponeurosis on one side, through the muscles and out through the opposite external portion of the aponeurosis, I leave them. Now, with chromic gut over all I unite the two external portions of the slit aponeurosis and then tie the two kangaroo tendons. This leaves a good deal of redundant skin, which I cut away, and close up the wound.

This next case is of a young man who has all the symptoms of duodenal ulcer, marked hunger pain being most prominent. He gives the history of having passed blood by the rectum, but I think this came from some other cause. His X-ray report is "distended stomach," but does not offer to suggest the cause. He declares he cannot work on account of the distress caused by his pain, and he certainly has a very distended stomach.

I open his belly, and find a distended stomach, but no sign of ulcer at present. His gall-bladder is bound down from the fundus to the duodenum, and, as Dr. Edwards says, this may have been the result of an old ulcer, though I can find no other trace of it. I cut these adhesions and free the gall bladder, stitch over the serous coat and smear it with sterilized vaseline.

The pylorus seems somewhat thickened, but I can invaginate the duodenum and pass the tip of my fingers through it. I will be content with what I have done. (Dr. Edwards agrees with me in this.) If I did a gastro-enterostomy I should have to close the pylorus, and I do not care to do this. I prefer to see whether freeing the gall-bladder will relieve his symptoms, and, if not, I can do the more radical operation later on. Mayo, when asked at Murphy's Clinic to speak on the causes of the failures after gastro-enterostomy, said the chief cause of failure was in doing the operation in cases in which it was unsuitable.

Reviews.

MEDICAL ANNUAL, 1918.

In the "Medical Annual, 1918,"[1] the medical and surgical work and progress for the previous year is again set forth. The review, as usual, is comprehensive and well done. The contributors are all men of note in their own departments, and include such names as Wm. E. Fothergill, Herbert French, J. Ramsay Hunt, Robt. Hutchinson, Fredk. Langmead and Leonard Rogers. The book is well illustrated with figures and plates. War subjects, as in preceding years, find a prominent place, and there are articles on gun-shot wounds, shell-shock, soldier's heart, trench nephritis and trench fever. A special article on *paralysis agitans*, by Ramsay Hunt, is of more than ordinary interest. In the section on electro-therapeutics Cleveland has something interesting to say on the fallacy of ionic medication.

There is something to interest every medical reader in the volume.

Mr. A. R. Outtrim succeeded, on August 22, 1918, in pressing his Bill for the abolition of compulsory vaccination through its three stages in the Legislative Assembly of Victoria. It will be remembered that this Bill on previous occasions reached the committee stage, but no further. We trust that the members of the Council will have sufficient discrimination to reject it on the second reading.

[1] The Medical Annual, A Year-Book of Treatment and Practitioner's Index; 1918, Thirty-sixth Year. Bristol: John Wright & Sons, Limited; London: Simpkin, Marshall, Hamilton, Kent & Co., Limited; Demy 8vo., pp. 722. Price, 10s. net.

The Medical Journal of Australia.

SATURDAY, SEPTEMBER 28, 1918.

Treatment of Disabled Soldiers.

Every transport that comes to Australia brings back a number of disabled soldiers who are in need of medical treatment. These soldiers are placed under the care of the highly trained and experienced physicians, surgeons and specialists attached to the General Hospitals in the different Military Districts of the Commonwealth. At the public expense they receive the most skilful treatment that can be obtained in this country. Sooner or later their wounds and diseases are healed or alleviated and these soldiers are discharged into civil life. They return, some of them more or less disabled, to the task of earning a living for themselves and for those dependent upon them. A grateful country grants a pension to those that have some disability as a result of injury or of sickness. The amount of the national gratuity varies with the degree of disablement sustained upon active service. The greater the impairment in the capacity to compete with others in a similar civil occupation, the more the amount of the pension.

The returned soldiers have become scattered through the length and breadth of the land; in the crowded capital cities and in the remotest country districts they seek a living in one or other of the many occupations followed in the community. Many of these returned men have been subjected while on military service to a severe strain which has revealed defects in their physical and mental organization. As a consequence of the careful attention of the medical officers of the Army Medical Corps, these defects have ceased to cause illness. When the returned soldier takes up the labour of the daily task and faces the worry of supporting his family by his own efforts, his health may become poor. Illness may occur and the returned man may be forced to seek medical advice. The illness will be, in part, the result of circumstances and conditions that have arisen since discharge from the Forces, and, in part, an effect of the damage to the constitution incurred on active service. Illness may not only affect the returned soldier, but it may also break out in his family among those dependent upon him. From the point of view of the soldier, illness to himself or to his family is much the same, since it necessitates the services of the medical practitioner.

At present the returned soldier may obtain medical attendance by visiting any of the General Hospitals situated in each Military District. Those men who are living in the capital cities of the States will have no difficulty in obtaining the highest medical skill. This medical advice will be provided for them by the Department of Defence. The returned soldier who has gone into the country, possibly some distance from a hospital, has to seek the advice of a private medical practitioner. If the returned soldier belongs to the small wealthy section of the community he will pay for the services of the medical attendant, but, if he belongs to the larger section of the community which must pay for what it needs by its weekly wage, he will be unable to pay for the attention that he receives. The medical practitioners of Australia have ever exercised a noble charity, and no returned soldier will go short of any necessary treatment because he is unable to pay a fee. Every medical man will give his best skill to the returned soldier free of expense to him who cannot pay. We may, however, ask whether the people of this Commonwealth hold that returned soldiers discharged from the ranks owing to disability, should be dependent upon the charity of the medical profession for what medical assistance they need. Surely it is only needful to draw the attention of the Department of Repatriation to the necessity of drawing up a scheme for providing medical treatment at the public expense for every returned soldier who is endeavouring to support himself and his family by his own labour. Such a scheme must be available to the soldier throughout the Commonwealth and must permit the soldier to obtain medical attendance in the neighbourhood of his home.

STAMMERING.

Stammering is a psychological condition in which there is a loss of control of the processes of vocalization. It varies from the spasmodic repetition of the initial consonant or syllable of words to the compliated stammer resulting from the inco-ordination ex-

isting between the sets of respiratory and articulatory muscles. It usually arises from some nervous condition in childhood. A failure to undertake efficient treatment at the time leads to the ingraining of the habit, which becomes difficult to eradicate. Many cases of stammering have appeared among soldiers who have been subjected to shell or war shock. These patients have been at times difficult to treat successfully. In this issue of *The Medical Journal of Australia* we publish an account of the successful use of hypnotism by Major Clarence G. Godfrey at the No. 5 Australian General Hospital. When the patient is thrown into the hypnotic state, suggestion immediately enables the patient to speak better than in the waking state. In some patients speech has become that of the normal person and the patient has remained cured on awakening from the hypnotic state. These results show clearly that stammering is to be regarded as a psychosis and not as a neurological affection. We may hope that this method will have a wide use in restoring free speech to those soldiers who received a mental shock leading to loss of control over vocalization. In this issue we also publish some remarks upon the significance of stuttering and stammering by Dr. T. Garnet Leary. His account of corrective measures gives much information about this troublesome habit. It would seem that stammering can be overcome if a systematic effort is made to train the patient to control breathing and vocalization. It would also appear advisable to commence combating the condition as early as possible. Every effort should be made to break down the habit and to inculcate confidence in vocalization as early as possible after the stammering has become noticeable. The large number of persons who have been taught to speak freely, bear witness to the success of these educative efforts.

THE TOXICITY OF SALTS OF COPPER.

From time to time during the last seventy years investigations have been carried out upon the pharmacological properties and the toxicological action of salts of copper. These studies have led to universal recognition of the parasiticidal and germicidal qualities of copper. About forty years ago Millardet introduced the use of copper for combating certain vegetable growths which attacked vineyards. The exact researches of Naegeli on the influence of copper upon the growth of *Spirogyra* gave an impetus to the employment of preparations of copper as an effective agent for the purification of city water supplies from living algoid plants containing chlorophyll and for the control of fungoid pests in orchards. Bordeaux mixture, a suspension of cupric hydrate in lime water, is the most widely applied fungicide in horticultural practice. Copper has long been recommended as a therapeutic agent in such diseases as enteric fever, cholera, cancer, diarrhœa and dysentery, leprosy, actinomycosis and sporotrichosis. Copper was formerly used to colour vegetables a vivid green. This process was held for a long time to be dangerous to the health of man, and was forbidden for some years by law in France. Later the legislation against the use of copper for this purpose was repealed.

Experimental investigations have revealed that the value of copper as a fungicidal bactericidal or therapeutic agent depends upon bringing the copper into contact with the organism to be affected in a particular form and concentration. Although some preparations have been alleged to be more effective than others in inhibiting the growth of fungi, Bedford and Pickering have brought forward evidence that the concentration of copper is the sole factor regulating efficiency. In regard to the effects of copper upon more highly differentiated organisms there appear to be great differences in the results obtained. While one investigator has found a preparation to be of considerable toxicity, another has reported the same combination to be harmless. A study[1] has been made of the activity of a number of compounds of copper with different amino-acids by H. L. Huber. The action of these organic preparations has been compared with that of copper sulphate, a typical inorganic salt. Choice of these organic compounds was made, since it was thought that the amino-acid radicles might be utilized within the organism, and that their use would eliminate the introduction of radicles which might modify the reaction. The preparations that have been tested have been an easily soluble compound (copper leucinate), a slightly soluble compound (copper glycinate) and a dibasic form (copper glutaminate). A series of observations have been made upon the local toxic action of the solutions upon intra-cutaneous injection and upon installation into the conjunctival sac. The results show no appreciable differences in irritant effect. Another series of observations have been made on the acute toxicity after subcutaneous injection. In order to eliminate the effects of local necroses, the solutions have been used in a more dilute form than by previous investigators. It has been, therefore, necessary to give the injections at several points. In consequence, there has been rapid absorption. Death has occurred in ten to twelve hours. The appearances at autopsy have been similar with the three organic and with the inorganic combination.

The most interesting portion of this research lies in the attempt to produce a chronic intoxication with copper. It has long been known that workmen with copper may show no symptoms of intoxication, though the hair, nails, gum and bones may be coloured green with copper. Three series of guinea-pigs have been given the different preparations of copper by subcutaneous injection, by intra-muscular injection and by feeding. The experiments have been made upon

[1] *Journ. Pharm. and Exper. Therapeutics*, Vol. XI., p. 203, May, 1918.

young, growing guinea-pigs, and have been continued for about four months. The subcutaneous injections have been made every three or four days into the loose connective tissue of the axillæ or the groins. The intramuscular injections have been given at the same intervals into the muscles of the fore or hind limbs. The enteral administration has been thrice daily, in the form of pills. The guinea-pigs all throve well and increased greatly in weight. Their growth seemed in no way less than that of the controls. When the guinea-pigs have been killed at the end of the observations no pathological changes could be noticed in any of the organs. Microscopical examination of sections from the heart, spleen, liver, lungs and kidneys showed no abnormal appearances. While no differences whatever could be found between the organs of the animals treated with copper and untreated guinea-pigs, chemical analyses showed that copper was accumulating in considerable quantities in certain of the organs, notably the liver and the kidneys. No differences could be observed in the rate at which copper accumulated in the organs with the manner of administration. Admixture of copper with the food seemed just as effective as direct injection. Although much more copper could be found in the liver and kidneys, copper could be detected in measurable amounts in the spleen, heart and lungs. These results show that copper may be introduced into guinea-pigs for long intervals of time in quantities which produce no acute toxic symptoms, without giving rise to any symptoms of chronic poisoning, although the tissues may retain a certain amount of copper for months. The quantity of copper found in the liver and kidneys is many times more than may be found in the same organs after acute poisoning with copper.

THE USE OF THE TITLE CHEMIST.

Since the formation of the Australian Chemical Institute in July, 1917, there has been a movement to restrict the use of the title chemist to members of the Institute. During the last half century the word chemist has had a dual connotation. It has been applied to those who prepare and dispense drugs and medicines and is used, in this sense, by the great bulk of the people. It has also been given to those few in number who have devoted attention to chemistry and who have become deeply acquainted with the properties of different kinds of matter. In the various States of the Commonwealth the sale of drugs and poisons is restricted to certain persons, who are registered by a specially appointed Board. These persons are known as registered pharmaceutical chemists in most of the States, though they are designated as registered pharmacists in New South Wales. In certain States the use of the title "chemist" by any unregistered person with the object of implying that he is entitled to dispense remedies, is made an unlawful act liable to punishment.

It will be recognized by all unprejudiced persons that the apothecary has been popularly known as a chemist and that most persons refer to the pharmaceutical chemist by the simple title of chemist. While pharmaceutical chemists, as a class, may no longer possess an extensive knowledge of chemistry, yet some pharmaceutical chemists will have a profound acquaintance with chemistry. The science of chemistry owes a great debt to the labours of the older apothecaries. Many discoveries of the greatest value have been made by those who laboured to know all that could be learned of the drugs that they handled.

At a conference recently held in Melbourne between representatives of the Victorian Branch of the Australian Chemical Institute and of the Pharmaceutical Society of Victoria an agreement was reached to endeavour to obtain legislation to restrict the use of the title chemist to registered pharmaceutical chemists and to members of the Australian Chemical Institute. This agreement does not seem very satisfactory. The use of the title chemist might imply that the holder was qualified to dispense medicines, and it is obvious that most members of the Australian Chemical Institute are not so qualified.

It would seem better to leave this matter of title for time to adjust the difficulty. Every pharmaceutical chemist should possess an adequate knowledge of chemistry. Greater attention is being given to the education of the pharmaceutical chemist in Australia. The pharmaceutical chemists would be able to deal better with the preparation of medicines if they possessed such a knowledge of chemistry as would enable them to become members of the Australian Chemical Institute. Such an increased training would not only be advantageous to them individually, but would enhance their value to the community, by ensuring the presence of those acquainted with chemistry throughout every part of Australia. The chemist would be able to perform analyses and give other advice which can at present be obtained only with difficulty.

PUBLIC HEALTH IN TASMANIA.

The members of the medical profession in Tasmania entertained Dr. C. L. Park at a farewell luncheon at the Orient Hotel, Hobart, on August 28, 1918. Dr. W. W. Giblin occupied the chair and presented to Dr. C. L. Park a Tasmanian rug as a gift from his colleagues. Dr. W. W. Giblin complimented Dr. C. L. Park on the able manner in which he had administered the Department of Public Health in Tasmania, wished him every success in his new post as Chief Quarantine Officer for the State of Victoria in the Quarantine Branch of the Department of Trade and Customs of the Commonwealth, and regretted that the profession in Tasmania should lose a confrère who had acted so handsomely towards the medical profession during his years of service in Tasmania.

EYE, EAR, NOSE AND THROAT CONGRESS.

In connexion with the Eye, Ear, Nose and Throat Congress to be held in Melbourne on October 30 and 31 and November 1, it is announced that the following subjects will be discussed:

Proposed Eye Subjects: Coma, iritis and optic neuritis.

Proposed Ear, Nose and Throat Subjects: Suppurative catarrh of the middle ear, asthma and allied neuroses, indications for operation on the *septum nasi*, intra- and extra-nasal surgery of the frontal sinus and papillomata of the larynx.

Any member wishing to read papers on these subjects, or upon any other subject, should communicate with Dr. M. E. Lynch, 127 Collins Street, Melbourne.

It is announced that Captain J. H. Peek, R.A.M.C., who is serving with British forces in Italy, has been created by His Majesty the King of Italy a Knight of the Order of the Crown of Italy. Captain Peek served with the New South Wales Mounted Rifles in South Africa.

Abstracts from Current Medical Literature.

PATHOLOGY.

(101) Isolation of Typhoid Bacilli.

C. Botelho has tested a new culture medium for the rapid detection of the presence of bacilli of the typhoid group in mixtures containing many kinds of micro-organisms (*C.R. Soc. Biol.*, Paris, May 5, 1917). The principle underlying the use of this method is the fact that typhoid and paratyphoid bacilli cause a reappearance of the blue colour of a lacto-phenolated solution of Poirier blue, incorporated in sucrose-agar, before this colouration is brought about by colon bacilli and other commensual germs of the intestinal flora. The medium is made as follows: A solution is prepared containing 50 cgm. of Poirier blue and 30 gm. of lacto-phenol. This mixture is diluted one-third with distilled water. A strong syrup is made by dissolving two parts of white crystalline sugar in one part of water. A peptone-agar medium is made containing five parts of salt, ten parts of agar and fifteen parts of peptone in 1,000 parts of water. The medium is prepared for use by taking 100 gm. of the agar, adding 2 c.cm. of the blue dye and 10 c.cm. of syrup and treating with 2% aqueous caustic soda until decolourization is complete. The medium is placed in small, sterile tubes containing 3 c.cm. medium. The sowings are made by deep puncture. The tubes are employed as follows: If four tubes of this medium are infected with typhoid bacilli and with the paratyphoid bacilli A and B and with colon bacilli, it will be noticed after four or five hours' incubation that a sharp blue colouration is visible in the tube sown with typhoid bacilli and with paratyphoid bacilli, while the tube inoculated with colon bacilli shows no blue colour for several hours later. In carrying out the test six tubes are arranged in sets of two, one set is inoculated with material from the intestine of a healthy person, in the second set a similar inoculation is made along with a pure culture of typhoid bacilli, while in the third set is placed the material to be examined. The six tubes are placed in the incubator at 37° C. and removed for examination at the end of four or five hours. If the tubes inoculated with the material for determination appear blue at the same time as the positive control, the material contains bacilli belonging to the typhoid group. This method has been used for sufficiently long in the laboratory to demonstrate the value of this rapid method of diagnosis.

(102) Antigenic Properties of Microbes.

A. Ranque, Ch. Senez and N. Fiessinger have studied the antigenic qualities of streptococci grown upon an ascitic medium (*C.R. Soc. Biol.*, Paris, May 25, 1918). They have observed certain antigenic qualities with the bacilli grown on ascitic fluid and have desired to know whether these phenomena can be obtained with all microbes cultivated on this fluid. In respect to fixation of complement they find that a similar effect is produced with other organisms. For example, the serum of a rabbit immunized by injections of staphylococci and sterilized by the addition of iodine yields antibodies which are fixed by the antigen formed by staphylococci grown upon ascitic media, but which are not fixed by staphylococci cultivated upon media not containing ascitic fluid. The serum of a rabbit immunized by injections of typhoid bacilli yields antibodies which are fixed by typhoid antigen obtained from bacilli grown upon any media. Experiments have been carried out which show that, in the process of immunization, two kinds of antibodies are formed. One kind, specific for the injected microbe, is produced only against such micro-organisms as induce sensitization. The other kind, which is not specific, differs from the specific antigen in that it can unite with the antigen of any kind of organism, provided it is grown upon ascitic fluid. Contrary to what the authors believed, iodine has no influence on the development of this reaction. Similar results have been obtained by employing opsonic reactions in place of complement fixation.

(103) Poliomyelitis in Monkeys.

S. Flexner and H. L. Amoss have made some experiments upon monkeys which have been immunized against the virus of experimental poliomyelitis, to determine whether the neutralizing substances of the blood are merely diverted into the meninges by reason of serum increasing the permeability of the meningeal-choroidal complex (*Journ. Exper. Medicine*, July, 1918). It is known that neutralizing substances are present in the blood in man in some cases as early as the third day of an attack of poliomyelitis. Some experiments were made to determine whether active complement is needed for the destruction of the virus of poliomyelitis *in vitro*. These experiments show that the neutralization of the virus occurs without the intervention of complement. Further experiments have made it clear that readily measurable quantities of the neutralizing antibodies are poured into the cerebro-spinal fluid, commencing twelve hours after normal horse serum is injected into the meninges of immune monkeys. The passage of these antibodies continues for at least forty-eight hours. The transfer of these antibodies would probably continue as long as the permeability of the meningeal-choroidal complex persisted. These experiments make clearer the manner in which recovery from poliomyelitis may be brought about. Immune bodies do not pass normally from the blood to the cerebro-spinal fluid, which is the lymph of the central nervous system. In poliomyelitis the entire vascular system of the meninges and affected portions of the nervous organs, as well as of the structures of the choroidal plexus, is often injured so as to become permeable to the proteins of the plasma and also to the immune bodies contained in it. The latter begin to appear in the cerebro-spinal fluid just as soon as they commence to accumulate in the blood. From the blood they permeate to the central nervous system. As soon as this transfer of antibodies begins, the neutralization of the virus in the nervous tissues would also take place. An arrest of the multiplication of the virus is affected. In this connexion it may be noticed how quickly extension of the paralysis ceases after the administration of antiserum.

(104) Serum Diagnosis of Syphilis.

Hideyo Noguchi considers that the elimination of the use of complement of the guinea-pig from the serodiagnostic procedure for syphilis simplifies the reaction (*Journ. Exper. Medicine*, July, 1918). Fresh human serum has been utilized for the source of complement to bring about hæmolysis upon human corpuscles in the presence of an adequate amount of specific anti-human amboceptor prepared in rabbits. About 0.1 c.cm. fresh human serum contains enough complement to hæmolyze one cubic centimetre of a 1% suspension of human corpuscles, but the amount of anti-human amboceptor required in this combination is from five to seven times that necessary when the complement of the guinea-pig is used. When a given human serum contains insufficient complement, sufficient of another fresh negative serum may be added to supplement it. The drawback of this new method is the comparatively large amount of anti-human hæmolytic amboceptor needed. Noguchi describes a method to obtain a powerful anti-human hæmolytic amboceptor by five or six intraperitoneal injections of blood corpuscles which have been thoroughly washed free from serum. Finally, emphasis is laid on the fact that only the acetone-soluble fraction of tissue lipoids of required standards should be used when human complement is employed in the fixation test.

PÆDIATRICS.

(105) School Doctors and School Dentistry.

Most medical men nowadays recognize the intimate relation existing between a healthy mouth and a healthy body. In addition to the manifestations of dental disease itself, it is not always recognized that most of the dental and even palatal deformities of everyday experience are entirely preventable, and, indeed, should be prevented if recognized in their incipient stages by the family or school doctor, both of whom may have the first opportunity of recognizing what may happen to the teeth and jaws as the child approaches its eleventh or twelfth years, when most dental deformities become apparent to the cursory observer and at the same time difficult to treat. Wallis (*School Hygiene*, April, 1918) points out that deformities of the superior maxilla, as shown by a high, narrow palate, are largely dependent upon untreated nasal

obstruction. If this be treated early, the palate should develope normally, apart from such deformities as may be induced by thumb-sucking or the use of the "comforter." A small amount of judicious dental extraction at the proper time may entirely prevent the onset of many of the dental irregularities so often seen, and, in addition, the chronic gingivitis frequently associated with these conditions may be prevented and the tendency to ultimate *pyorrhœa alveolaris* arrested at an early stage. Deformities of the jaws and irregularities of the teeth are not merely æsthetic deficiencies; if the teeth do not articulate normally mastication is necessarily impaired and dental caries follows on the absence of the natural tooth cleansing properties of a normal dietary. Teeth for any reason non-functional, *viz.*, pain or deficient articulation, become encrusted with tartar and chronic gingivitis and oral sepsis result. Abscess affecting a temporary tooth will frequently affect the enamel of its permanent successor. Such affected temporary teeth should be cleansed and stopped. The author considers that a school medical inspector should be aware of the normal dates of eruption and the deformities that may result from premature or delayed extraction. In this connexion it may be noted that the deformity of outstanding upper canine teeth is usually due to premature extraction of their temporary predecessors, which has allowed the first premolars to advance and encroach upon the space to be occupied by the permanent canines when they erupt near the age of twelve. The school inspector should be able to recognize and differentiate at a glance teeth of the first and second dentition; and should be able to recognize such everyday dental conditions as alveolar abscess, which has occasionally been taken for erysipelas; arrested caries or caries artificially arrested by the use of nitrate of silver should also be recognized. He should also have a full realization of the seriousness of oral sepsis in regard to the health and development of school children, not forgetting its relation to actual school work and conditions.

(106) Breath-Holding Attacks.

Abt (*Arch. of Pediatrics*, June, 1918) describes breath-holding (also known as hysterical laryngospasm, rage spasm and inspiratory apnœa) as occurring frequently in childhood. At first sight the attacks appear to be manifestations of spasmophilia or tetany with the associated *laryngismus stridulus*, but closer investigation shows these suppositions to be erroneous. The breath-holding attacks manifest no true laryngeal spasm. The breathing is restive, or stops suddenly in the midst of a crying attack, but there is no inspiratory spasm. The child usually works himself into a rage, cries for a time and then suddenly stops, finding it impossible for a brief period to make any further sound. The inspiratory muscles remain in a tonic state. The child throws himself about and becomes cyanotic or pale. Then the body becomes rigid and the eyes turn or become set. For a moment it seems that the child is asphyxiated. The attack usually lasts a few seconds and then disappears. It may, however, continue for several minutes, while, in the more severe cases, it may be followed by convulsions. These attacks are differentiated from minor epilepsy in that they follow immediately after severe crying, excitement or anger, while epileptic attacks occur suddenly in the midst of quiet play or even during sleep. Biting of the tongue, which occurs in epilepsy, does not occur in breath-holding. Involuntary evacuation of the bladder or rectum may occur in either attack. The long sleep that usually follows an epileptic attack may also occur after breath-holding. These attacks of breath-holding occur in neuro-pathic children, and are brought on by fear, anger, fright or some other psychic trauma. As a rule, children subject to such seizures are irritable and ill-tempered. The condition is very often aggravated by neuropathic parents, who fear the occurrence of these attacks and humour the child in every possible way. It is obvious that such treatment does not help the child to build up any degree of resistance to the recurring attacks. After some time has elapsed most of these children practically recover. Children who fall ill with acute infectious disease, or who, by reason of accident or injury, require surgical treatment, may be seized with a severe breath-holding attack, accompanied by general convulsions, as a result of the fright they have sustained. Under such circumstances the attack may be so severe as to terminate fatally. Treatment should be directed towards the general management of the nervous child. Stimulation of every kind should be avoided. The patient should be ignored as much as possible by parents and friends. When the attacks occur there should be no fussiness or consternation or any of the hysterical manifestations usually evinced by mother or nurse. Cold water dashed into the face has been suggested as a direct remedy. Finally, the patient should be shown in no uncertain manner that any repetition of the attacks will be met with harsh measures.

(107) Hydrocephalus of Poliomyelitis.

Researches pursued on the pathology of poliomyelitis have shown that œdema is one of the prominent characteristics of the disease. Several factors especially predispose to such a condition; thus, the return flow of lymph from the tissues of the cord and brain is interfered with by the infiltration of the perivascular sheath of the blood vessel wall, while at the same time the veins, being more infiltrated than the arteries and their lumen more easily obstructed, due to a less rigid structure, the venous return flow is more hindered than the arterial in flow, with a resultant tendency toward venous stasis, and hence toward œdema. These two factors, in conjunction with the congestion accompanying the early stage of inflammation, explain in part the œdema. There may be concerned, also, some toxic effect, acting locally on the blood vessel wall. In addition to the œdema of the nervous system, there is also an actual increase in the quantity of spinal fluid in the subarachnoid spaces and in the ventricles of the brain. This is proved before death by the large quantities commonly obtained by lumbar puncture and post mortem by the increased amount found. There is probably coincident with the congestion of the brain a hyper-secretion of cerebro-spinal fluid by the choroid plexuses, and, at the same time, the Paccionian bodies fail temporarily to transmit the increased amount produced to the sinuses. This condition of acute, non-obstructive hydrocephalus should give rise to certain definite clinical symptoms, and Regan (*Amer. Journ. of Dis. of Children*, April, 1918) classifies the hydrocephalus of poliomyelitis according to the type of symptoms and the time they persist. He describes first the hydrocephalus of the onset, including the preparalytic and early paralytic stages. Here, coincident with the marked increase in the spinal fluid content of the sub-arachnoid space, the child becomes drowsy or stuporose, with pupils dilated and reacting rather sluggishly to light. Irritability may be marked; the respirations and pulse become rapid and even irregular; vasomotor flushings may appear. Ataxia, headache, rigidity of the neck and profuse sweating may also occur. Even with the supervention of paralysis, these symptoms may persist, unless relieved by lumbar puncture. The paralytic phenomena of the early stages may often be, in part, due to the œdema and the hydrocephalus, for not infrequently there will be definite improvement following relief of pressure. Secondly comes the hydrocephalus persisting after the first week of the disease. (*a*) The condition may be so mild that practically no symptoms are noticeable, yet often a slight Macewen sign will be present, and lumbar puncture will yield an increased quantity of spinal fluid under pressure. This is the usual type. (*b*) In other cases, there may be distinct evidence of pressure, which, with an elevated temperature, may remain for an unusually long period, the diagnosis depending on the presence of Macewen's sign or a bulging fontanelle. Lumbar puncture in these cases will often bring about a subsidence of the fever, and a disappearance of the nervous apprehension and irritability, and of the profuse sweating, and a regulation of the jerky, laboured breathing. (*c*) In a few patients with extensive paralysis involving all four extremities and the intercostal muscles, a severe type of persistent hydrocephalus may occur. The children are from the first desperately ill, and a decided loss of weight, with rapid shrinkage of the subcutaneous tissues, occurs, even though food is taken in large amount. Trophic changes appear, the mentality becomes duller, and the child dies of acute inanition. In all these cases Macewen's sign provides a definite means of easy and early recognition of the condition and its employment in all cases of poliomyelitis is of the utmost importance.

British Medical Association News.

SCIENTIFIC.

A meeting of the New South Wales Branch was held at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, on August 30, 1918, Dr. A. A. Palmer, the President, in the chair.

Dr. P. L. Hipsley read a paper entitled "A Résumé of Fifty-one Cases of Intussusception." The paper was illustrated by very excellent photographs projected on the screen. These illustrations depicted (*i.*) the groove in the terminal portion of the caecum, corresponding to what Dr. Hipsley described as the caecal sphincter; (*ii.*) the groove corresponding to the retinacula of the ileo-caecal valve; (*iii.*) the marked hypertrophy of the lymphoid tissue in the mucous lining of the caecum and ileum from cases of intussusception, and (*iv.*) the characteristic differences in the shape of the gut in infants and in adults. He demonstrated the sites of commencement of the intussusception, and also referred to sundry points alluded to in his paper.

Dr. W. F. Litchfield thought that Sydney could be proud of its records of the results of treatment of intussusception. No better series of cases had ever been published than those compiled by Dr. Clubbe. The younger surgeons had kept up the excellent record. At the Children's Hospital they had between 30 and 40 cases a year. This number represented a larger incidence than that of strangulated hernia in the great metropolitan hospitals. He held the opinion that Dr. Clubbe's success in the treatment of this condition was due to quickness, to caution in not exposing the child to shock and to proper after-treatment. He held that it was very important that the infants should be put to the breast as soon as possible after the operation, and that they should not be kept in hospital longer than was absolutely necessary. He thought that Dr. Hipsley had been very lucky in not having met with enteritis and broncho-pneumonia among his little patients.

Turning to the question of diagnosis, he had found that it was at times extremely easy, and at other times remarkably difficult. He gave an instance of an easy diagnosis. A child, aged seven months, was taken ill suddenly. It was screaming, and was obviously in pain. He saw the child almost immediately, and, on putting his hand on the abdomen, he felt the characteristic lump of an intussusception of the intestine. The child was operated on within an hour of the onset. In other cases the lump could not be felt, even when the patient was placed under the influence of an anæsthetic. The symptoms were intermittent, sudden screaming, a flattened abdomen, the passage of blood and mucus per rectum and a palpable lump in the abdomen. At times the intussuscepted portion of the bowel could be felt per rectum. In the differential diagnosis the only condition which was likely to cause confusion was colitis. He referred to the so-called colic intussusception. He had never seen a case, and it was not mentioned by Dr. Clubbe in his book. This omission had given rise to some adverse criticism. It was stated that great distension of the abdomen was characteristic of the condition. In conclusion, he said that he regarded Dr. Hipsley's theory that intussusception was due to hypertrophy of the lymphoid tissue in the affection portion of the intestine as a reasonable suggestion.

Dr. D. D. Kelly congratulated Dr. Hipsley on the success of his treatment. He, the speaker, had seen a great number of cases of intussusception. During the two and a half years when he was a resident medical officer at the Children's Hospital in Melbourne he had seen 40 cases. In the course of 17 years of private practice, however, he had only been called upon to treat 22 or 23. He raised the question whether it was advisable or necessary to operate in every case. Dr. David Oliver had claimed remarkable success from the treatment of these cases with olive oil injections. He referred to a case which had occurred in his own home. His child, aged 16 months, bent down to pick up an object, and was suddenly taken with great pain. The child screamed and became very pale. There was no vomiting. On palpating a few minutes after the onset, an intussusception was felt quite distinctly. He was able to reduce it by manipulation through the abdominal wall, but, on relaxing, the intussusception occurred. He sent for Dr. MacMaster, who hung on to the abdomen for over a quarter of an hour and succeeded in getting the intussusception completely reduced. There was no question of the correctness of the diagnosis. The child was watched very carefully for a couple of hours, as it was anticipated that the intussusception would return. Their fears, however, were not realized. The objections to operation were not merely the objection to the procedure. The scar tissue was likely to produce trouble later on. He considered that Dr. Hipsley's experience was very wonderful, in that he did not have any deaths from pneumonia. He was interested to note that Dr. Hipsley employed a high incision. He had followed Mr. Hamilton Russell's practice, and still made a low incision, but recognized that this had a considerable disadvantage, chiefly in the risk to which the bladder was exposed. In one case he had found that the intussusception was due to a polypus. He asked Dr. Hipsley whether he had met with either a new growth or a polypus in any of his cases.

Dr. Archie Aspinall raised the question why fishing gut sutures were passed right through the skin and underlying structures. With so small an incision, he doubted whether there would be much loss of time in closing the abdomen in layers. He considered that Dr. Hipsley's paper was a very valuable one, more particularly because students in general hospitals did not see many of these cases.

Dr. A. A. Palmer referred to the grooves demonstrated by Dr. Hipsley in his excellent pictures. He raised the question whether it was accurate to describe a groove as corresponding to the retinacula of the ileo-caecal valve. He doubted whether there was such a thing as the ileo-caecal valve in the living subject. Dr. Rutherford had called his attention to this matter, on account of his observations in a patient who had a fistula of the caecum. He had been able to watch the orifice of the ileum, and he had come to the conclusion that it had no resemblance at all to a valve. He, Dr. Palmer, had collected a considerable amount of post mortem material, and had also come to the conclusion that the appearance seen in dried specimens and known as ileo-caecal valve was not met with, either during life or immediately after death. The orifice was really more like a sphincter.

In his reply, Dr. Hipsley stated that he always advised that the infants should be put to the breast as soon after the operation as their condition admitted. He did not agree with Dr. Litchfield entirely concerning the dangers of hospitals for babies. He preferred to keep these infants in the hospital for at least two weeks. In the summer time, it was true, it was necessary to be careful to avoid gastro-intestinal infections. He had only once met with a case in which the lump could not be felt. He had not seen a pure case of colic intussusception. The great distension spoken of could only begin when the intussusception had taken place beyond the transverse colon.

He agreed with Dr. Kelly that it was unnecessary and inadvisable to operate on every case. On the other hand, non-operative deduction necessitated very careful watching for a considerable time after the manipulation. In reply to Dr. Aspinall, he stated that he never passed his sutures through the peritoneum, as this would increase the risk of infecting the cavity. He quite agreed with Dr. Palmer that the so-called ileo-caecal valve was in reality a sphincter.

Dr. S. Harry Harris read a paper on "Some Causes of Renal Pain and Their Treatment (Exclusive of Stone, Tuberculosis and Infection)." The paper was freely illustrated by skiagrams and pyelograms projected on to the screen and by mounted pathological specimens. This paper will be published in a subsequent issue. There was no discussion.

Several members expressed their indebtedness to Dr. Harris for his valuable contribution.

William Joseph Macdonald, M.B., Ch.M., 1914 (Univ. Sydney), of "Cooleen," Wycombe Road, Neutral Bay, has been elected a member of the New South Wales Branch.

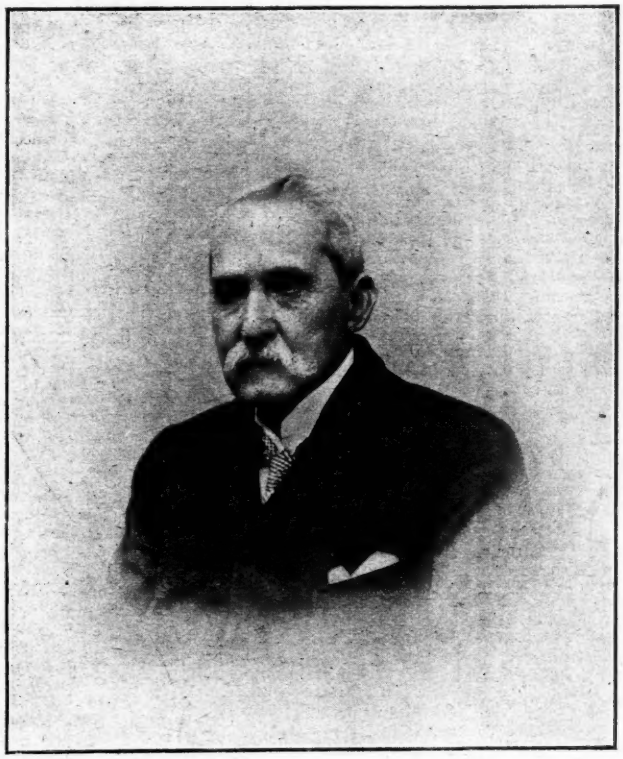
Obituary.

SIR PHILIP SYDNEY JONES.

Standing beside the open grave of the late Sir Philip Sydney Jones, the Reverend George Littlemore, who had been his intimate friend for 33 years, remarked that at that

place little was necessary to be said about the general outline of Sir Philip's distinguished career. His associates in many philanthropic enterprises would sadly miss him. His loss would be most deeply felt by those who were associated with him in Christian worship through many years. He had a Catholic mind and a kindly heart. He had lived a life of ceaseless activity for four-score years and more, and his heart had beat all that time with high, passionate thoughts. There were many there who were privileged to call him friend. Sir Philip had been his own friend with unfailing goodness for the third part of a century. These words serve to convey to those who did not know him the impression which the late Sir Philip Sydney Jones made on those with whom he came in contact. He was a good man, who exercised an ennobling and inspiring influence on all with whom he was associated.

Philip Sydney Jones was born in Sydney in 1836. He went to the school kept by Mr. Cape, at which so many of the citizens of Sydney who acquired fame in the middle of the nineteenth century received their early instruction. Later he attended a grammar school instituted by Mr. T. S. Dodds at Surry Hills, and finally received the latter part of his education at the academy of Mr. Henry Cary at Darling Point. On leaving school he went to Europe to finish his general education. He entered at University College, London, where he was enrolled as a student of medicine. He distinguished himself greatly during his course of medical studies, and obtained medals for great proficiency in anatomy and in medicine. He graduated as Bachelor of Medicine in 1859, taking the degree of the University of London. In the next year he succeeded in obtaining the higher degree of Doctor of Medicine of the University of London, and in 1861 he secured the Fellowship of the Royal College of Surgeons of England. He devoted great attention to the practical study of his profession, and received the gold medal given by Dr. Fellowes to the most proficient student in clinical knowledge of his year. He filled with satisfaction the offices of House Surgeon and House Physician and that of Resident Medical Officer to the University College Hospital, London. Having concluded his medical studies, he went to Paris for some months to gain a wider acquaintance with the arts of medicine and surgery. He returned to Sydney in 1861 and commenced practice in College Street.



Within a few months of his return to New South Wales he was elected an Honorary Surgeon to the Sydney Infirmary (now known as the Sydney Hospital). The election was made by the whole body of subscribers. His colleagues were Drs. Charles Nathan, Alfred Roberts (afterwards Sir Alfred Roberts) and Charles McKay. The duties of the staff in those days were onerous, since there was only one resident house surgeon, and each member of the Honorary Staff was expected to do his own dressings. Dry dressings were unknown, and much time was spent in applying wet cloths. This position was held by Sir Philip for 14 years, when he was elected an Honorary Consulting Surgeon, which office he held until his death. In 1863 he married Hannah Howard, daughter of the Reverend G. Charter. Like the other medical practitioners of his day, Sir Philip Sydney Jones carried on a general practice. There was no specialism in the 'sixties, and all kinds of special and general surgery were carried out by the medical practitioner. Sir Philip was the first medical man in Sydney to remove successfully an ovarian tumour. In 1876 Sir Philip gave up general practice and established himself as a physician. He was the first medical man in Sydney to engage in consulting practice. In 1887 he was appointed an Honorary Consulting Physician to the Royal Prince Alfred Hospital, a position that he occupied until his decease. His skill and care made him the leading physician in Sydney of his day. In 1867 he joined the Royal Society of New South Wales and took a leading part in the medical section of that body. At the time of his death he was the oldest member of the Society, having been a continuous member for 51 years. In 1882 he was a member of the Royal Commission appointed to investigate and report on the arrangements of the Quarantine Station. The result of this Commission was the establishment of the Quarantine Station at North Head, Port Jackson, for the reception of all cases of infective disease that come to New South Wales by sea. The value of the work of this Commission is shown by the fact that it has not been necessary to re-model the system suggested by the Royal Commission, even after 35 years' experience.

Sir Philip Sydney Jones took great interest in the progress of education in New South Wales, and especially in the education of medical students. At one time he acted as an Examiner in Medicine to the University of Sydney. From 1887 until the time of his death he was a member of the Senate of the University, being elected by the graduates. For two years (1904 to 1906) he served as Vice-Chancellor. At the public meeting held in the Hall of the Sydney Exchange on March 20, 1868, he was elected a member of the Committee appointed to raise funds for the purpose of erecting a permanent and substantial memorial as a token of the heart-felt gratitude of the inhabitants of New South Wales for the recovery of His Royal Highness, the Duke of Edinburgh. At this meeting it was further decided that the form of memorial most appropriate to the object in view and best calculated to represent the feelings of the community would be a hospital for the relief of the sick and maimed. Along with his life-long friend, Sir James Fairfax, he served on this first Committee formed to establish the Royal Prince Alfred Hospital. He was not appointed a Director under the Act of Incorporation of the Hospital passed in 1873, but he became a member of the Board in 1878, and served for five years, when he resigned. He rejoined the Board in 1904, and held office as a Director at the time of his death. He had served as a Director for 19 years, acting on the House Committee on a number of occasions. He was Chairman of the Medical Board of the Royal Prince Alfred Hospital for many years. His courteous and considerate

bearing towards his colleagues on the medical staff made him an ideal chairman for this body.

When the third Intercolonial Medical Congress of Australasia was held in Sydney in 1892 Sir Philip Sydney Jones was unanimously elected President. He carried out the duties of his high office with great distinction, although he suffered the loss of his wife a few weeks before the holding of the Congress. In his address he set before the members of the Congress the progress of the healing art during the previous forty years, covering in that time his own personal experience. Special reference was made in this address to the advance made in securing the health of citizens by better sanitation. Through the opening of parks, sewerage and draining works and other such means he showed how many lives had been saved and what an enormous number of cases of illness had been prevented. He believed that further advances might be made by the adoption of electricity for lighting and of gas for heating and by the consumption of smoke. With reference to the adulteration of foods, he emphasized the improvements brought about in the laws and he drew attention to the great progress in medical knowledge which enabled the infection of typhoid fever, diphtheria and scarlatina to be traced to milk. He thought that there was little doubt that the milk of the cow suffering from tuberculosis might communicate the disease to children. The time could be foreseen when the medical profession would conquer the whole range of zymotic disease by wider knowledge.

In 1896 and 1897 he was President of the New South Wales Branch of the British Medical Association. In the course of a thoughtful address he drew the attention of the members to the utilization of X-rays, and observed that the subject was one of great promise. He also directed the thoughts of the profession to serum therapy, which was then in its infancy. Already the value of antisera in diphtheria and in rabies had attracted attention, and sera were being used in the treatment of tetanus, erysipelas and septicæmia. The success which had attended the use of thyroid extract in myxœdema and in cretinism had suggested the probable value of the "internal secretion" of other ductless glands in diseases in which the organs from which these secretions were obtained were involved. The subjects of the address reveal the acumen and foresight possessed by Sir Philip as a medical practitioner.

In 1905 his name appeared in the list of honours conferred by the King on the occasion of the celebration of his birthday. Dr. Philip Sydney Jones was made a Knight Bachelor in honour of his distinguished services to science in combating consumption. Great satisfaction was felt in New South Wales, not only by the medical profession, but also by the public, at this public recognition of his services. The Council of the New South Wales Branch of the British Medical Association decided to mark its appreciation of the honour conferred upon him by collecting subscriptions to defray the expense of having his portrait painted in oils. The University Senate granted permission to hang the portrait in the Great Hall of the University. The portrait was painted by Mr. Percy Spence and presented to Sir Philip by Dr. Antill Pockley at the close of the annual meeting of the New South Wales Branch of the British Medical Association on March 30, 1906. In making the presentation Dr. Pockley said that all those present knew how Sir Philip had the full trust and confidence of his professional brethren. In his professional attainments, his ripe experience and his high standard of honour, in his unfailing affability, accessibility and courtesy he stood for all that was best in the medical profession. He was a not infrequent attendant at their meetings, and, in this respect, he set an example to many of the senior members of the profession. They all knew what he had done on behalf of the consumptive poor, and the wholeheartedness and devotion with which he had thrown himself into the work of establishing sanitoria.

For 30 years Sir Philip Sydney Jones was a member of the Medical Board of New South Wales, and acted as President during the year 1909. His public duties also included that of a member of the Royal Commission, consisting of His Honour Judge Rogers, Dr. Norton Manning and himself, which enquired in 1895 into the notorious Dean case. In 1903 he acted as a member of the Royal Commission on the decline of the birth-rate and on the causes of infantile mortality. In 1913 he was made a member of the Tuberculosis Board appointed by the Government of New South Wales to advise concerning measures for the suppression of tuberculosis.

Sir Philip Sydney Jones will perhaps be specially remembered for his unceasing efforts to stamp out tuberculosis. He believed that pure air was the best cure for the condition, and was the pioneer in New South Wales of open-air treatment. He was instrumental in the establishment of the Queen Victoria Homes at Thirlmere and at Wentworth Falls for the treatment of patients suffering from early tuberculosis. He was President of the Executive Committee which administered the affairs of these sanitoria for a lengthy period. He gave much time and consideration to the work of these institutions. In 1914 he took a leading part in the foundation of the National Association for the Prevention and Cure of Consumption and was the first President of this Association. He gave much valuable advice concerning the institution of the anti-tuberculosis dispensaries, which have been founded in New South Wales during the last five years. In December, 1905, the members of the Executive Committee of the Queen Victoria Homes for Consumptives presented him with a portrait of himself in sepia as a mark of esteem and in recognition of his devotion to the cause of the consumptive poor in New South Wales. This picture was hung in the hall of the Sanitorium at Wentworth Falls.

Sir Philip took an active part in many charitable institutions. Mention may be made of his services in connexion with the New South Wales Institution for the Deaf and Dumb and the Blind. In 1916 he served as the Vice-President of the Institution. Sir Philip always possessed great interest in scientific pursuits. He was an original member of the Linnean Society of New South Wales in 1875, although he does not seem to have maintained his membership of that body. He was a Trustee of the Australian Museum, and retained his trusteeship until his death. He was associated with the work of the Kindergarten Union. For many years he attended the Pitt Street Congregational Church, but for the last 30 years he was associated with Trinity Church, Strathfield, at which he was the Senior Deacon.

Sir Philip was not a voluminous writer, but a few papers dealing with the treatment of consumption and with medical ethics are scattered through the pages of the *Australasian Medical Gazette*.

He left three sons and four daughters. His sons are Dr. Philip Sydney Jones, of the Glebe, New South Wales, Mr. G. Sydney Jones, architect, Sydney, and Mr. David Osric Sydney Jones, of Teebar Station, Wide Bay, Queensland. The daughters are Miss Lucy Sydney Jones, Mrs. E. Lloyd Jones, Mrs. R. M. Thompson and Mrs. M. Lidwell. He died at Strathfield on September 18, 1918, aged 82 years.

He has given to the medical profession of New South Wales the pattern of the wise physician of exemplary probity, of unfailing courtesy and of widest charity. He utilized his professional attainments as far as possible for the benefit of his fellow-citizens. He employed his great experience in the care and treatment of the sick, for the healing of those who were ignorant whence cure came. His advocacy of better methods for the control of tuberculosis reveal to us the noble spirit of the learned and skilled physician. For a quarter of a century he was recognized as the leader of the medical profession in New South Wales.

Dr. C. Purser writes as follows:—

"I had the extreme pleasure of working in conjunction with the late Sir Philip Sydney Jones on various boards and committees for many years. We were fellow-members of the University Senate since 1909 and fellow-Directors of the Royal Prince Alfred Hospital since 1909, but our most intimate and closest relations, as co-workers, were on the Executive of the Queen Victoria Homes for Consumptives from the inception of that movement in 1897 until 1905. Sir Philip, then plain Dr. Sydney Jones, was the originator of the movement, and was Chairman of the Executive, and I was Honorary Secretary during that period, and, since it was a pioneer work, we were intimately connected in the work. A fund had to be established, a site had to be selected for a home for men, the home had to be designed and built, and the home at Thirlmere, which had been established by that estimable citizen, the late J. H. Goodlet, and which had been carried on by a Committee for some years, was taken over and adapted for women only. Sir Philip was heart and soul in the work, painstaking, thorough, an indefatigable

worker, and he never eased off, nor was he content, until these homes were established on a sound basis. He remained in touch with them ever since. It was a very pleasant task to work in conjunction with him, and it will always be with the kindest thoughts that I shall look back upon those years of work together. At first acquaintance he presented himself as somewhat reserved, but when you came to know him, his nature was a most lovable one. Absolutely straight, sound, thorough and cautious, might be terms applied to his work. His fellow-feeling for suffering humanity was very noticeable, and he was ever ready to listen to tales of distress and give kindly and good advice.

"His work as a Director of the Royal Prince Alfred Hospital was equally as thorough and up to the best. As one of the Inspection Committee he was always alert to note defects and was ever ready to suggest improvements and give good advice to remedy defects. His kindly presence and excellent advice will be markedly missed from all committees of which he was a member."

Sir Thomas Anderson Stuart writes:—

"When I arrived in Sydney in March, 1883, I heard a good deal about Dr. Sydney Jones, who was at the time absent in Europe with his family on a trip of some years' duration, and when, in due time, he returned to Sydney I went to see him at his rooms in College Street. This was the house in which he had, in earlier years, lived while in general practice and whence he migrated to Strathfield, where he had purchased a large area of land, on which he built the mansion in which he lived ever afterwards until his death. I think he must have been about the first medical man to adopt the plan, now so common in Sydney, of living in the suburbs while retaining only consultation rooms in the city. I found him what he remained, a quiet, earnest, thoughtful man, quite evidently not physically strong. This indeed was true; all his life he had to 'take care of himself,' and so he was able to outlive many of his more robust friends. I afterwards came to know him in his family life at 'Llandillo,' in the time of Mrs. Sydney Jones, who predeceased him by many years, and found him a most genial host and kindly head of the family.

"He was elected to the Senate of the University in 1887, so that we have been colleagues there for thirty-one years. During all that time he was always the same, steady-going supporter of everything that was of good report. I think his outstanding work there was his long advocacy of a Chair of Architecture, and it is a pity that he is dead just as the School of Architecture for which he did so much is being started. He was Vice-Chancellor for two years (1904 to 1906). It has often occurred to me that he was just the sort of man who should have been nominated to a seat in the Legislative Council, where he would have been a most useful member. I feel sure that he would have valued the position, for he was a native of the State and always manifested a spirit of the purest and most ardent patriotism. Like Sir James R. Fairfax, who alone is now left of the Founders of the Hospital, he was connected with the Royal Prince Alfred Hospital from its first days. Later on he joined the staff as Honorary Consulting Physician, and, until not so long ago, he was Chairman of the Medical Board. Later on still he joined the Board of Directors, and was with us there when he died. Here his most prominent activity was as a member of the Conjoint Board, consisting of the Board of Directors sitting with the Senate of the University, by which all appointments to the medical staffs are made. As a citizen and as a medical adviser he was one of the most trusted men in the community; no man stood higher in the estimation of the public."

Dr. W. H. Crago contributes the following remarks:—

"After an intimate association of thirty-five years with the late Sir Philip Sydney Jones in various activities, his decease has caused a distinct blank in my environment.

"During the last quarter of the nineteenth century Dr. P. Sydney Jones occupied an unique and important position in the medical community of Sydney and of New South Wales. He was generally looked upon as the leader of the profession in New South Wales, and when it was arranged to hold the Third Session of the Australasian Medical Congress in Sydney in 1892 he was unanimously chosen as its President. A few weeks before the Congress was to meet he suffered a great trial in the death of his wife, but, with characteristic courage, he decided to carry out the duties devolving upon him as President, and with what success he did so is well remembered by the members of the Congress.

"For some years after the formation of the New South Wales Branch of the British Medical Association Sir Philip, with some other senior members of the profession, held aloof from it, and continued to devote his energies to the Medical Section of the Royal Society, of which he and the late Sir Normand MacLaurin were the Honorary Secretaries; but when the influence of the Medical Section waned and the Branch of the British Medical Association came to be recognized as the chief organization of the profession, he threw himself heartily into its work and became a regular attendant and speaker at its meetings. He occupied the presidential chair for the year 1896-7.

"When the honour of knighthood was conferred upon him in 1906 he modestly claimed that it was an honour conferred upon the medical profession rather than for any personal merit of his own.

"In friendly intercourse Sir Philip completely lost his somewhat reserved manner, entering freely into conversation and enjoying a joke as well as anyone. He was a man of wide benevolence, but gave with discretion, taking the trouble to investigate the facts of a case before contributing to it. Many a brother practitioner, when in pecuniary difficulties, has found a real friend in him. He was uniformly kind and considerate to young practitioners, and always ready and willing to help them with his advice. He was not easily turned aside from anything he set his mind on, and, if occasion arose, could put up a good fight for what he considered to be right. Few members of the profession have enjoyed the confidence and respect, both of their *confrères* and of the public, to the same extent as Sir Philip did. His untiring and unselfish efforts in advancing the health and well-being of the community, especially in the matter of the open-air treatment of tuberculosis, made him a public benefactor.

"For several years after the deaths of Dr. F. Milford and Sir Arthur Renwick, Sir Philip devoted considerable attention to the management of the Benevolent Fund of the defunct Australian Medical Association, of which he was an original member, and about a year ago, feeling the encroachments of old age, he handed over the care of the Fund to Trustees named by the Council of the British Medical Association.

"Sir Philip Sydney Jones, in the punctilious discharge of his many duties, in his courteous manner and in his irreproachable character, was an embodiment of the best traditions of our profession."

AUSTRALIAN RED CROSS SOCIETY.

The South Australian Division of the Australian Red Cross Society is making an appeal in September, 1918, for funds to provide the sick and wounded men on all fronts and the prisoners of war with those comforts and small luxuries which are a necessity to them. The support of the medical profession is earnestly sought. Donations may be sent to the Honorary Treasurer of the appeal, Mr. J. A. Riley, 23 Waymouth Street, Adelaide, by whom an official receipt will be issued.

Special Correspondence.

(By Our Special Correspondent.)

LONDON LETTER.

The General Medical Council.

The summer session of the General Medical Council was opened at 44 Hallam Street on Tuesday, May 28.

It was intimated that Mr. Tomes, the senior Treasurer, had been re-appointed for one year Crown nominée for England, and that Sir Donald MacAlister had been re-appointed representative of the University of Glasgow for five years.

Dr. Norman Moore proposed and Sir John W. Moore seconded the re-election of Sir Donald MacAlister as President for the ensuing five years.

Having taken the chair, Sir Donald MacAlister then delivered his presidential address, in the course of which he said

that the demands made by the war on qualified medical practitioners was still increasing. The transfer of the duties of selection and distribution to the Ministry of National Service had led to better organization and to fuller co-operation between the authorities and the civil professional committees. But those improvements in machinery alone had proved inadequate to meet the greater need for man-power in the field and at home. Accordingly, the new Military Service Act had extended the service age limit for the whole of the population of Great Britain to fifty, and of medical men to fifty-five. This special legislation for their profession was a tribute to its general healthy standard; it was certainly an admission that the remaining supply of practitioners under fifty was too scanty to provide for all the fresh national requirements which the situation had induced. This latter conclusion had been urged on the Government for over a year past by professional bodies. The practical mode of meeting the situation now adopted by Parliament might not be what all would approve, but they would do well to accept it as an honour that, as they were held capable of a unique form of service for the State, so they were charged with a heavier responsibility than others.

Dr. McVail moved: "That it be remitted to the Education Committee (1) to report to the November session of the Council as to whether the Council should take any action towards promoting or systematizing the teaching of preventive medicine in the medical schools throughout the country, and (2) to make such enquiry as the Committee may find necessary to enable it to report." The motion was carried after considerable discussion.

The report of the Finance Committee was presented by Mr. C. S. Tomes. It showed that the income of the General and Branch Councils amounted to £7,710 16s. 4d., and the expenditure to £7,342 4s. 6d. He pointed out that a saving might be effected this year of about £800 by postponing the election of direct representatives.

The consideration of other Committee Reports and the dealing with cases of a disciplinary character occupied the Council during the remainder of the session, which terminated on May 31.

The Romanes Lecture.

The Sheldonian Theatre at Oxford was crowded to its utmost capacity on June 8, to hear the Romanes Lecture. Mr. Asquith was the orator, and he took for the subject of his interesting discourse "Some Aspects of the Victorian Age."

He began his lecture with a comment on the curious fact that in English history the only sovereigns who had given their names to an epoch had been reigning queens—Elizabeth, Anne and Victoria. He prophesied that, for generations to come, historians would speak of the Victorian Age.

The most obvious thing to arrest the attention in any survey of the Victorian Age was the almost paradoxical incongruity between what might be aptly termed its outward and its inward life. Outwardly the middle class of the time moved in uninspiring surroundings; within the growing pains of democracy were hardly beginning to be felt.

Though not so insular in their habits of mind and feeling as sometimes represented, from time to time genuine sympathy was met with, what one of their great orators had once described as nationalities "rightly struggling to be free." They were no knights errant, but concentrated their energy and attention upon the attainment of the commercial and financial primacy of the world. It took a long time to make them realize that they might be paying too high a price in capturing the markets of the world under a system of industry which crippled and stunted the women and children of the country.

The orator passed under rapid review a long series of famous men—Carlyle, Macaulay, Disraeli, John Stuart Mill, Spencer, Matthew Arnold, Meredith, Charles Darwin, Gladstone and Tennyson. He paused to emphasize that in 1809 America witnessed the birth of two of the greatest men—one in the sphere of action, the other in the sphere of imagination—that that continent had produced: Abraham Lincoln and Edgar Allan Poe. He said he had included Gladstone and Disraeli in his list of worthies, not because of their being politicians, but in spite of it. He referred to two immortal works, the "Pickwick Papers," of Dickens, and the "French Revolution," of Carlyle, and alluded to the books of Sir Edward Clarke, whom he described as a bright ornament of the forensic and political world. He thought it was novelists rather than poets who had left the deepest impress upon the popular imagination. The Victorians used to discuss who were the greatest writers of their time, but comparisons of that kind, if not futile, were at least unprofitable. Men and women of the greatest genius could not be labelled and classified like plants and politicians.

Mr. Asquith then passed on to consider the rise and fall of the Tractarian Movement, the Broad Church, and the relative positions of Robertson and Spurgeon. All these topics, he said, would have to be placed by the historians in their due and proper perspective, and the several speculative tendencies would have their place in the history of thought.

A reference to Herbert Spencer's "Synthetic Philosophy" brought the lecturer to the open assault at Oxford on the fashionable cult of Mill, and on the influence exerted on their times by Jowett, Mark Pattison, Froude and Freeman.

He thought the art of the Victorians was difficult to fix, but, in the domain of science, Faraday and Kelvin were among those who had transformed the face of the world and the habits of mankind.

Speaking of Darwin and the "Origin of the Species," he pointed out that there was nothing new in the theory of evolution. He testified to the spirit animating Darwin and Wallace in their contemporaneous investigations, but would not touch on even the fringe of the controversy as it presented itself to biologists. He was not qualified, he said, to enter the court of the outer temple of science.

Finally, he declared that man's physical pedigree, whatever it be, must be regarded as of little moment. Whether his origin was by special creation or by development from lower forms of organic life, somewhere and somehow, he was united with something that was to be found nowhere else.

He only hoped that, fifty years hence, in that chair, his successor would be able to say that the contribution of the post-Victorians was comparable to that of the Victorians in the things that permanently enrich mankind.

A New Degree at the University of Birmingham.

Sir Oliver Lodge, the Principal of Birmingham University, announced on May 23 that it was proposed to establish a new degree, similar in its significance to the Ph.D. degree of German universities.

The new degree would be one of the outcomes of the war. It had its origin in the fact that American and other overseas students, who had been accustomed to go to Germany for higher study and research, would not be likely to go there again, probably, for many years. Hence it was proposed that provision should be made for graduate students in Birmingham.

CORRECTION.

In the article on "The Treatment of Phthisis by Means of Para-Toluene-Sodium-Sulphochloramine (Chloramine-T), by Dr. F. W. Waters, line 17, in the right-hand column, page 200, should read "vaccine injected or taken by the mouth, which, whilst."

Public Health.

NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the week ending September 14, 1918:—

	Metropolitan Combined District. Cs.	Dths.	Hunter River Combined District. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Enteric Fever ..	4	0	0	0	5	0	9	0
Scarlatina	19	1	1	0	8	0	28	1
Diphtheria	30	3	1	0	50	0	81	3
*Pul. Tuberculosis	9	6	3	1	0	0	12	7
C'bro-Sp'l Menin.	1	0	0	0	2	0	3	0
Malaria	1	0	0	0	0	0	1	0

* Notifiable only in the Metropolitan and Hunter River Districts, and, since October 2, 1916, in the Blue Mountain Shire and Katoomba Municipality.

VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending September 15, 1918:—

	Metropolitan. Cs.	Dths.	Rest of State. Cs.	Dths.	Total Cs.	Dths.
Enteric Fever	0	0	2	0	2	0
Scarlatina	20	0	38	0	58	0
Diphtheria	87	0	64	4	151	4
Pulmonary Tuberculosis	22	4	15	5	37	9
Poliomyelitis	0	—	1	—	1	—

QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending September 14, 1918:—

Diseases.	No. of Cases.
Enteric Fever	2
Scarlatina	7
Diphtheria	40
Pulmonary Tuberculosis	9
Erysipelas	2
Anchylostomiasis	5

SOUTH AUSTRALIA.

The following notifications have been received by the Central Board of Health, Adelaide, during the week ending September 7, 1918:—

	Adelaide. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Enteric Fever	0	0	2	0	2	0
Scarlatina	1	0	11	0	12	0
Diphtheria	0	1	31	3	31	4
Pulmonary Tuberculosis	3	1	1	6	4	7
C'bro-Spinal Meningitis	0	1	0	0	0	1
Morbilli	1	0	3	0	4	0
Pertussis	0	0	30	0	30	0
Favus	0	0	1	0	1	0

WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the week ending September 7, 1918:—

	Metropolitan. Cases.	Rest of State. Cases.	Totals. Cases.
Enteric Fever	1	1	2
Scarlatina	8	3	11
Diphtheria	15	6	21
Pulmonary Tuberculosis	7	1	8
Septicæmia	1	0	1

TASMANIA.

The following notifications have been received by the Department of Public Health, Tasmania, during the week ending August 31, 1918:—

Diseases.	Hobart. Cases.	Launceston. Cases.	Country. Cases.	Whole State. Cases.
Diphtheria	1	1	4	6
Pulmonary Tuberculosis	1	0	1	2
C'bro-Spinal Meningitis	0	0	1	1
Ophthalmia Neonatorum	1	0	0	1

Naval and Military.

APPOINTMENTS.

The following notices dealing with appointments, etc., have appeared in the *Commonwealth of Australia Gazette*, No. 148, of September 19, 1918:—

Australian Imperial Force.

Army Medical Corps.

Major F. C. Wooster, from 11th Field Ambulance, is transferred to command 13th Field Ambulance, and is granted the temporary rank of Lieutenant-Colonel whilst so employed. Dated 12th June, 1918.

Captain S. H. Seccombe, 1st Light Horse Field Ambulance, is granted the temporary rank of Major. Dated 12th January, 1918. (This cancels notification regarding this officer published in Executive Minute 391/1918, promulgated in *Commonwealth of Australia Gazette*, No. 87, dated 13th June, 1918.)

To be Captains—

Honorary Captain O. F. De Lacy, Australian Army Medical Corps Reserve. Dated 9th May, 1917.

Robert Roger. Dated 16th August, 1918.

Westmore Frank Stephens. Dated 22nd August, 1918.

Australian Military Forces.

Grant of Honorary Rank.

The undermentioned, who have served in the Australian Imperial Forces as Commissioned Officers, have had the rank held by them in the Australian Imperial Force confirmed as honorary rank in the Australian Military Forces:—

Officers who, on appointment for active service outside Australia, were serving and are now serving in the Australian Imperial Forces or Senior Cadets.

Second Military District.

To be Honorary Majors—

Captain C. Shellshear, Australian Army Medical Corps. Dated 6th February, 1916.

Captain W. H. Donald, Australian Army Medical Corps. Dated 14th November, 1916.

Third Military District.

To be Honorary Major—

Captain H. V. P. Conrick, D.S.O., Australian Army Medical Corps. Dated 6th February, 1916.

Citizen Naval Forces of the Commonwealth.

Royal Australian Naval Brigade.

It is announced in *Commonwealth Gazette* No. 142 that Leonard John Dunstone, M.B., B.S., has been appointed Surgeon, and to be a District Naval Medical Officer, Port Adelaide, 1st February, 1918.

Correspondence.

MILITARY ORTHOPÆDICS.

Sir,—The excellent article on orthopædics by Dr. Lennox Teece should surely arouse the authorities here as to the necessity of doing something effective. It is the old story of jealousy on the part of the general surgeon; he is unwilling to admit that anyone can know more about a special branch of surgery than he does. There is no question but that some general surgeons are good orthopædists, for instance, might I name Mr. Hamilton Russell, but by far the greater majority are not, and, in consequence, our soldier lads are dismissed without that full treatment which is their due. Sometimes men are discharged without ever seeing a surgeon worthy of the name. I saw one only last week with a bullet wound through the outer part of his palm. A hideous deformity resulted. Here was a case of perfectly useless hand, that only wanted reposition and a new tendon to regain complete use. Such instances could be multiplied over and over again. The bungle over the limbs is another instance of how not to do things. It is to be hoped that Lieutenant-Colonel Wade, who is getting less than a half we pay the agent of a limb factory in America, will be allowed to be something more than a glorified masseur. Those of us who have worked at home and abroad in orthopædic hospitals know their value. The French, from the very outset, saw the need for specialization. Here in Melbourne every surgeon does everything and anything. A dozen men do a dozen different cases, instead of each man doing a dozen of the same type. When I went home last year I was told

that an orthopædic unit was not required for the Australian Imperial Forces, yet 40 to 50 Australian soldiers were always to be found as inmates of the Shepherd's Bush Hospital—a purely orthopædic institution. Why should we continue to cadge on England?

Yours, etc.,

W. KENT HUGHES.

22 Collins Street, Melbourne.

(Undated.)

VOLUNTARY ENROLMENT.

Sir,—Is there still a shortage of doctors for active service conditions? If so, I would like once more to bring under your notice a scheme which I suggested to you about twelve months ago, *viz.*, getting a list of all those men who are willing to serve in any capacity for a limited period, say twelve months, and handing this list to the authorities.

There must be very many men who, like myself, are willing or even anxious to serve, but who, from financial or other causes, cannot be away from their practices for an indefinite period. Under some such scheme as this the supply of medical men could be kept up for a very long time.

Yours, etc.,

ALEC. LYONS.

"Nirvana," Church Street, Eaglehawk, Victoria, September 16, 1918.

Proceedings of the Australian Medical Boards.

TASMANIA.

The undermentioned has been registered as a legally qualified medical practitioner in Tasmania:—

John George Moore Sloane, M.C., P. & S. Ont. 1895, M.B. U. Toronto 1895, Hobart.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	**All Friendly Society Lodges, Institutes, Medical Dispensaries and other contract practice.** **Australian Prudential Association Proprietary, Limited.** **National Provident Association.** **Mutual National Provident Club.**
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. **Brisbane United Friendly Society Institute.** Rockhampton Associated Friendly Societies. Cloncurry Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments in South Australia. Contract Practice, Appointments at Renmark.
WESTERN AUSTRALIA. (Hon. Sec., Health Department, Perth.)	**All Contract Practice Appointments in Western Australia.**
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	**Australian Natives' Association.** **Balmain United F.S. Dispensary.** **Canterbury United F.S. Dispensary.** **Leichhardt and Petersham Dispensary.** **M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney.** **Marrickville United F.S. Dispensary.** **N.S.W. Ambulance and Transport Brigade.** **North Sydney United F.S.** **People's Prudential Benefit Society.** **Phœnix Mutual Provident Society.** **F.S. Lodges at Casino.** **F.S. Lodges at Lithgow.** **F.S. Lodges at Parramatta, Auburn and Lidcombe.** **Newcastle Collieries — Killingworth, Seaham Nos. 1 and 2, West Wallsend.**
TASMANIA. (Hon. Sec., Macquarie Street, Hobart.)	**Medical Officers in all State-aided Hospitals in Tasmania.**
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	**Friendly Society Lodges, Wellington, N.Z.**

Diary for the Month.

Sept. 30.—Vic. Branch, B.M.A., Election of Two Members of Federal Committee.
Oct. 1.—N.S.W. Branch, B.M.A., Council (Quarterly).
Oct. 2.—Vic. Branch, B.M.A.
Oct. 4.—Q. Branch, B.M.A.
Oct. 4.—Annual Meeting of Delegates of Local Associations of N.S.W. with the Council of N.S.W. Branch (first day).
Oct. 8.—Tas. Branch, B.M.A., Council and Branch.
Oct. 8.—N.S.W. Branch, B.M.A., Ethics Committee.
Oct. 11.—S. Aust. Branch, B.M.A, Council.
Oct. 11.—N.S.W. Branch, B.M.A., Clinical.
Oct. 15.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
Oct. 16.—W. Aust. Branch, B.M.A.
Oct. 17.—Vic. Branch, B.M.A., Council.
Oct. 18.—Q. Branch, B.M.A., Council.
Oct. 18.—Eastern Suburbs Med. Assoc. (N.S.W.).
Oct. 19.—Northern Suburbs Med. Assoc. (N.S.W.).
Oct. 22.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Oct. 25.—N.S.W. Branch, B.M.A.
Oct. 30.—Vic. Branch, B.M.A., Council.
Oct. 31.—S. Aust. Branch, B.M.A.
Nov. 1.—Q. Branch, B.M.A.
Oct. 30.-Nov. 2.—Eye, Ear, Nose and Throat Congress, Melbourne.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.